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Inside Dope

By George F. Taubeneck

UNO Has 236 Problems
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Economics a la Mode
Parable of the Rotten Apples

UNO Has 236 Problems

Yards and yards of copy could be written about the theatrically astounding international situation today.

But perhaps the problems are best summed up in a single sentence:

The United Nations Organization has just 236 pressing problems—Uranium 235, and Russia!

New Zealand Eels

New Zealand is hearing good reports of its latest export—quick-frozen eels—which are popular in Europe. New Zealanders consider eels a pest, and believe that their removal would help trout fishing. Scientists of the Canterbury branch of New Zealand's Institute of Chemistry are urging that there is much room for further development of the country's marine products.

Another triumph for quick-freezing!

Economics a la Mode

One of our Editorial Assistants—who reads everything, and hears a lot, too, dropped this typewritten dissertation on What Ails Us in front of our eyes just before leaving for another dinner-date.

It's so good that "Inside Dope" reproduces it without change, here-with:

Parable of the Rotten Apples

Uncle John, who was getting along in years and who was not as spry as he used to be, lived in a modest house on an acre of land two miles from the village.

Upon the property were several fine apple trees producing large red apples. Each year Uncle John made a little money by selling these apples at 3 cents each.

Uncle John hired a young fellow named Pete to pick and pack the apples and load them on the truck and paid him \$1 an hour for eight hours work each day Pete worked. It also cost Uncle John \$2 a day for baskets and to get the apples to market.

Pete picked 10 baskets of apples a day averaging 50 good apples to a basket.

In 1941 the picture looked like this each day that Pete worked:

10 baskets of 50 apples each at 3¢ per apple	\$15.00
Pete's wages—8 hrs. x \$1 per hr.	\$8.00
Cost of baskets and marketing	2.00 10.00

Uncle John's profit per day \$ 5.00

In 1942 Pete joined the Apple Pickers' Union and paid dues of \$1 to the Union each month. The Union Agent told Uncle John he should give Pete a 50% raise or \$1.50 per hour, which Uncle John agreed to do. The cost of baskets and marketing was now \$2.75 each day.

So in 1942, this was the picture:

10 baskets of 50 apples each at 3¢ per apple	\$15.00
Pete's wages—8 hrs. x \$1.50 per hr.	\$12.00
Cost of baskets and marketing	2.75 14.75

Uncle John's profit per day \$.25

In 1945, after V-J Day, the Union Agent raised Pete's dues in the Union 50% or to \$1.50 per month, said that on account of possible inflation Pete should get a raise to \$2 per hour. Uncle John said No unless the OPA would raise the price per apple.

(Concluded on Page 9, Column 1)

CPA Report Cites
February Drop
In Appliances

WASHINGTON, D. C.—Production of refrigerators and other consumer durable goods continues to lag, Administrator of Civilian Production John D. Small declared in his monthly report, issued last week.

While most actual production figures presented in the report were on January production, it was indicated that February figures would show decreases instead of gains, because of the strikes.

The Civilian Production chief declared that the fight against inflation might be determined by the speed with which consumers' durable goods—"the things that sop up inflationary buying power"—are produced.

Following is the report on various appliances:

Household Refrigerators

About 123,000 units were shipped in January, roughly the same as in December, but only 39% of the 300,000 a month rate which manufacturers attained in 1941. February shipments are expected to fall below January's.

Electric Ranges

January shipments are estimated to have been about 25,000 units, as compared with 29,000 in December, and a prewar average of 47,000 a month.

Home Laundry Equipment

Shipments for January were about 171,000 units, compared with 99,000 for December, and were at a rate of about 108% of the prewar average of 158,000 per month.

Home Radio Sets

Reports show that about 700,000 sets were shipped during February, increasing 27% over revised January shipments of 550,000 units, and being at a rate of about 65% of the prewar monthly rate of 1,100,000 sets.

4 Montgomery Ward
Models Ceilings Set

CHICAGO—Maximum retail prices for four 1946 models of Montgomery Ward & Co. household refrigerators were recently announced by OPA in Amendment 5 to MPR 598.

The order amended Appendix A in section 24 by adding to the table of retail prices the following Montgomery Ward models and ceilings:

1946 Model No.	1st zone	2d zone	3d zone
666	\$150.95	\$155.95	\$160.95
676	161.95	166.95	171.95
696	179.95	184.95	189.95
886	199.95	204.95	209.95

Each of the three zones takes in the following zones as defined in the regular Montgomery Ward retail pricing map: Zone 1—3, 5, 9 10; zone 2—1, 2, 4, 6, 8, 11-21, 29-39, 41; zone 3—7, 22-28, 40, 42-45, Region 5, Pacific Coast.

Coolerator Models Get
Distributor-Dealer Prices

DULUTH, Minn.—Maximum prices for sales by distributors to dealers for three models of refrigerator manufactured by the Coolerator Co. here were established in OPA Order 15, MPR 598, as follows:

DR-85: \$155.97 each.
R-75-S: \$161.17 each.
R-75: \$194.97 each.

Included in these prices are the federal excise tax and the five-year warranty. The prices are f.o.b. the distributor's warehouse, but when the shipment is made directly from the manufacturer to the dealer pursuant to the distributor's order, the prices are f.o.b. the dealer's city.

An extra charge of \$3.50 is permissible for a refrigerator equipped with a left hand door, OPA added.

N.E. W.A. to Meet
In Chicago April 22

NEW YORK CITY—Problems of reconversion, promotion, and public relations in the electrical wholesaling industry will be reviewed by more than 800 members of the National Electrical Wholesalers Association during the thirty-seventh annual convention scheduled for The Stevens hotel, Chicago, April 22-25.

President John L. Busey, General Electric Supply Corp., will preside at the opening session. In addition to an address by Mr. Busey, members will hear the managing director's report by Charles G. Pyle, a report by chairman W. I. Bickford, of the program committee, and D. T. Ackerly, representing counsel.

Mr. Pyle has announced that two important industry documents will be submitted for approval of the membership at an afternoon meeting on April 22 to which electrical manufacturers have been invited.

Details of the Association's recently announced program of Scientific Personnel Selection, which includes aptitude testing, will be outlined by Morris Pickus, president, The Personnel Institute, Chicago, whose organization has been retained to help prepare and conduct this national activity. A preview of the Edison Electric Institute-N.E.W.A. Basic Sales Training Course will be conducted by E. B. Ingraham, chairman, N.E.W.A. Appliance Division.

Arthur H. Motley, president, Parade Publication, Inc., will be the guest speaker at a dinner meeting on April 24.

Greenwood Co. Now
Making Compressors

BURBANK, Calif.—Allen D. Greenwood, president of the Allen D. Greenwood Co. here, has announced the appointment of L. H. "Bert" Polderman as vice president of the company in charge of the program for the manufacture and distribution of "Ace" refrigeration compressors.

Mr. Greenwood has entered into a manufacturing agreement with Lights, Inc., with whom Mr. Greenwood was formerly connected as an executive in the aircraft field, for the manufacture of refrigeration compressors. At the present time 1/4-hp. units are being manufactured, with 1/2 to 3-hp. machines to follow, it was stated.

Mr. Polderman was formerly a vice president and western manager for Carrier Corp. with many years of experience in the refrigeration and air conditioning field.

Also associated with the Greenwood Co. are Ed Reaume, former project engineer for Lockheed Aircraft Corp., and Donald Beeson, an engineer who has specialized on Diesels. These two men will head Greenwood's engineering department for the development of new refrigeration and air conditioning equipment.

The Greenwood Co.'s principal offices are located here with foreign offices being set up in London, Shanghai, and Buenos Aires.

Yates Gets 8% Increase
On Condensing Units

BELOIT, Wis.—A price increase of 8% per unit has been granted by OPA to Yates American Machine Co. for all the company's compressors and condensing units under 25 hp., according to Order 396 to MPR 591.

The price increase applies to all classes of purchasers and is subject to the company's usual discounts and allowances.

Resellers of these units may pass the price boost along by adding to their established prices the actual dollar-and-cents increase they pay to the manufacturer.

Housing Order Unlikely to Curb
Conditioning, Commercial JobsCPA Approval Appears Needed for Some Installations;
Locker Plant Construction May Be Restricted

DETROIT—Despite the apparently strict provisions of the Veterans Emergency Housing Program Order 1, it is thought that the order will not actually curb installations of commercial refrigeration and air conditioning equipment. It will probably be necessary, though, for contractors or store or home owners to obtain permits from district Construction Offices of the Civilian Production Administration before installations can be started.

Locker plants will probably be similarly affected. Locker plants are not exempt from provisions of the order, thus CPA approval would be required before they can be constructed.

Although there has been no official explanatory ruling issued as yet by CPA regarding the status of commercial refrigerators and air conditioning equipment under the act, a strict interpretation of the order would indicate that permits would have to be obtained first before they could be installed under the following conditions:

WHEN IS OKAY NEEDED?

1. Where they become "fixtures" through (a) attachment to the building by screws or nails, (b) connection to electric circuits except by plug-in cords, or (c) are hooked up to plumbing lines.

2. Where the cost would total more than \$400 in a residence or more than \$1,000 in commercial establishments.

Some so-called store air conditioners employ water-cooled condensing units, and must therefore be connected to plumbing lines. If their installed cost ran more than \$1,000, approval by CPA would apparently be required for their installation. And most store coolers probably cost more than \$1,000 today.

Installed cost of most residential air conditioning systems, both year-around and winter types, probably totals more than \$400, so permits would no doubt be required for their installation, also.

One industry executive, an official of one of the principal manufacturers of air conditioners, reported that he has checked the order carefully and found that while restrictions are imposed by the ruling, the situation should work out fairly well for the industry.

"Our experience has shown there is a difference of opinion among regional attorneys regarding the application of this order," he said. "Some think that the average store cooler doesn't even require a permit for installation, while others believe that permits must be obtained first."

USE DIFFERENT MATERIALS

"It's well to note," he continued, "that most of the materials employed in the manufacture and installation of air conditioners are not those used in home construction. Wire and piping used are of different sizes than those employed in residential housing, for example."

"After all, the intent of the housing order is not to put anyone out of business or to cut production, and there should be little if any trouble with store conditioners as there is no conflict with home construction involved," he declared.

"The best thing for the dealer to do in connection with this housing order is to check with his local CPA office," suggests this executive. "These local boards will set up a pattern of approval so that individual applications will fall into various categories, which will be approved or not in a routine manner. The dealer should point out to the local board the fact that little if any critical housing material is employed in store coolers, for example, and he should be able to convince the local officials to classify such jobs as rating approval without question."

"And when a dealer files an application for approval he should stress on the application the fact that no housing material would be involved."

Commercial refrigeration equipment is subject to the same restrictions regarding "fixtures" and costs as outlined for air conditioning, with one important exception. The order states that "refrigerators (other than refrigerators constructed as an integral part of a building) . . . in a restaurant" are not included in the term "fixture."

There is, however, no specific reference in the order to such commercial refrigeration applications as meat markets, grocery stores, etc.

Locker plants would appear to require permission from CPA before they could be constructed. Although locker plants are specifically mentioned in the \$1,000 maximum exemption for commercial buildings, and compressors and cooling equipment for cold storage warehouses and locker plants are not to be classified as "fixtures and mechanical equipment" under the order, locker plants as a whole are not exempted.

Construction costs of the locker plant building itself would invariably amount to more than the \$1,000 limit set for this class. Thus, even though the cooling equipment itself is exempt, the builder would have to obtain permission from CPA to erect a new locker plant.

(Concluded on Back Page, Column 1)

Bush Seeks \$850,000
For Plant Expansion

HARTFORD, Conn.—Bush Mfg. Co. here, producer of refrigeration products, has just announced a financing program to procure about \$850,000 which will be used to expand extensively the company's plant capacity in West Hartford and to increase working capital.

A registration statement filed with the Securities & Exchange Commission calls for issuance of 20,000 shares of 4 1/2% \$25 par value cumulative.

(Concluded on Page 4, Column 3)

8% Price Boost Granted
Frigidaire Commercial

DAYTON, Ohio—Frigidaire Division, General Motors Corp., has been granted an OPA price increase of 8% over Oct. 1, 1941, prices on commercial refrigeration and summer air conditioning equipment, electric storage water heaters, as well as accessories and repair parts for these items, according to Order 136 to Revised Supplementary Order 119.

The company need not use these new ceilings if their present OPA prices are higher than those determined by increasing Oct. 1, 1941 prices by 8%. The prices are subject to the company's usual discounts.

Resellers of this Frigidaire equipment, except manufacturers who use such items for the production of other products, may increase their present maximum prices by the actual dollar-and-cents increase they pay as the result of this price boost.

Edelmuth to Coordinate Gimbel's Appliance Sales

NEW YORK CITY—Barnard F. Edelmuth, president of Gimbel Brothers, Inc., announced April 1 that David L. Edelmuth had joined the company to direct the coordination of its merchandising activities in major appliances, radios, and other related hard lines in the four Gimbel stores located in New York, Philadelphia, Pittsburgh, and Milwaukee.

"Because of the greatly increased importance of these lines we believe our stores can do a much more effective merchandising job and serve our customers more advantageously by establishing a centrally directed program of coordination of this kind," Mr. Edelmuth said.

Mr. Edelmuth's association with the appliance business began in Bloomingdale's, New York, where he was a buyer of major appliances and with which store he was connected for eight and one-half years. He left there to assume the direction of the major appliance division of the Associated Merchandising Corp., a post he held for almost five years, leaving there to accept a position as vice president and director of the Grand Home Appliance Corp., manufacturer of gas ranges. Subsequently, he joined the Brewing Corp. of America.



GORDON D. PAYNE

Two Men Start Tulsa Firm

TULSA, Okla.—Harold C. Moody and Joseph S. Goepfinger have formed the Empire Furniture & Appliance Co. and opened a new store at 2532 East 11th St. here. Mr. Moody has been in the furniture business in Tulsa for 19 years while Mr. Goepfinger has had varied experience in a number of Tulsa business firms.

Bendix Appliances Names Payne, Morris Special Field Representatives

SOUTH BEND, Ind.—Appointment of two war veterans as special field representatives is announced by W. F. Linville, general sales manager for Bendix Home Appliances, Inc.

They are Gordon D. Payne of Detroit and Robert A. Morris of Portland, Ind. They will have headquarters at the home office.

Mr. Morris was decorated with the Navy Cross and the Croix de Guerre with palm for his exploits in commanding an LCT flotilla in the Normandy invasion. He served as an operations officer for an LSM flotilla in support of the Okinawa invasion. His rank upon discharge was lieutenant. He is a graduate of Purdue university.

Formerly with the J. L. Hudson Co., Detroit, as a salesman and member of the executive training squad, Mr. Payne managed a store at Albion, Mich., and was personnel manager of the L. H. Field Co. department store, Jackson, Mich., before being drafted in January, 1941. He served in the army five years, emerging as a major. Prior to his discharge, he was in France and Germany. He is a graduate of Wayne university.



ROBERT A. MORRIS

New Buffalo Store Opened

BUFFALO—Teck Appliances, Inc. has opened its new electrical appliance store at 772 Main St. in the new Teck Theater Bldg. The company's electrical contracting division has been in operation for several months. Herbert S. Carlson is president and general manager of the company, it was announced.

Ned's Auto Supply Plans To Sell Freezers, Frozen Foods In Larger Store

DETROIT—As a result of an expansion move giving the downtown outlet of Ned's Auto Supply here three times its former floor space, the firm is now able to devote one third of its 10,000 sq. ft. of first floor space to appliance samples and one half of its 5,000 sq. ft. of second floor space to complete kitchen and laundry displays, according to Robert W. Loucks, advertising manager.

The new store, located at 255 Michigan Ave., has 120 ft. of frontage on Michigan Ave. and 100 ft. on Wayne Ave., the majority of which is window display. The first floor appliance section borders on both streets, featuring such appliances as:

Philco, Kelvinator, Norge, General Electric, Hotpoint, and Crosley refrigerators; Estate, Tappan, Kelvinator, Hotpoint, and General Electric ranges; Gladiron and Ironrite ironers; and Hotpoint, General Electric, Maytag, Thor, ABC, Norge washers and Bendix Home Laundry units.

"We intend to add to our roster of appliances a refrigerator manufactured by the Gibson Refrigerator Co. under the Firestone Tire & Rubber Co. label as soon as it is in production," announced Mr. Loucks.

Several brands of home freezers and a 25-cu. ft. model of the Pak-A-Way frozen food storage cabinet manufactured by Schaefer, Inc., of Minneapolis will also be retailed by Ned's when the units are available, it was learned.

Retailing of numerous brands of frozen foods is an added attraction of the first floor appliance section. All of Ned's eight outlets in this vicinity retail frozen foods, with the exception of one suburban store which plans to add this facility in the near future, according to Mr. Loucks.

Alterations are still in progress on the second floor, but Mr. Loucks believes that the model kitchen and laundry displays soon will be open to public inspection. Grand opening of the store was held last week.

No major appliances are for sale at Ned's, and orders are not being taken since no definite delivery date can be specified at this time, according to Mr. Loucks.

Water Heater Ceiling Set

LANSING, Mich.—Maximum retail price, excluding Federal excise tax, for sales of No. 60-7-W 30-gallon oil fired storage water heater with an insulated galvanized boiler manufactured by the Duo-Therm Division of Motor Wheel Corp. here was set at \$117.75 by OPA Order 379, MPR 591.

CARRENE NO. 1

- Cut your moisture problems.
- No other refrigerant will operate satisfactorily in a Grunow refrigerator (note—Factory Bulletin No. 177).

GRUNOW
AUTHORIZED SERVICE, INC.
4313 W. Fullerton Ave., Chicago, Illinois

"RECORD" WATER DEFROST



REFRIGERATION ENGINEERING INC.
107 ANGLIS - CALIFORNIA

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NO DEFROSTING
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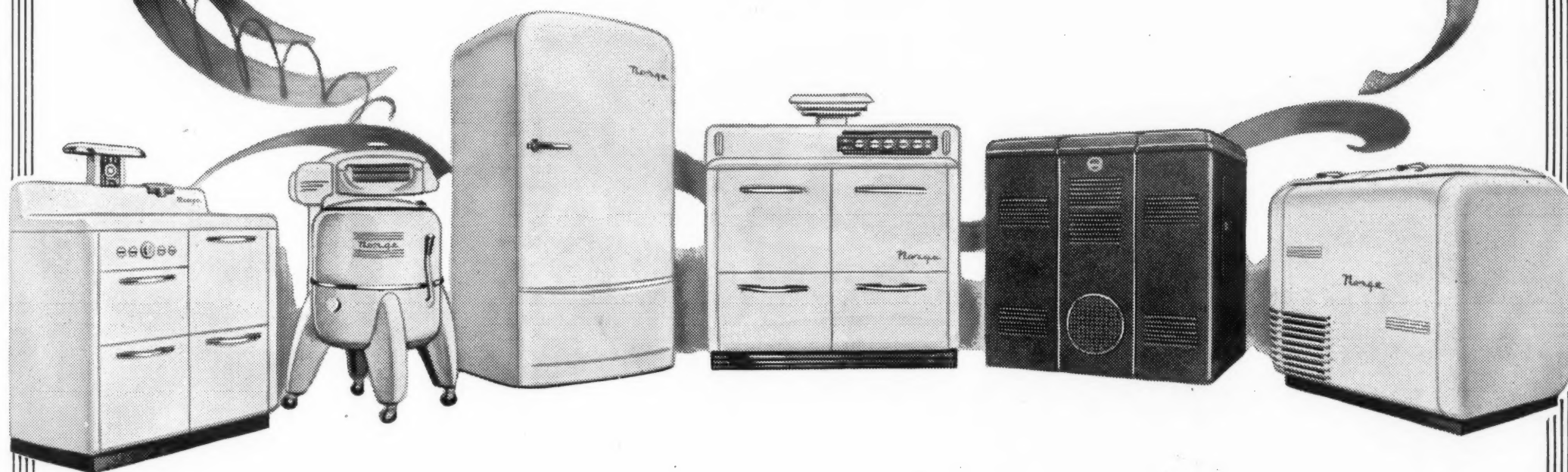
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Built to be
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Norgé is the trade-mark of Norgé Division, Borg-Warner Corporation, Detroit 26, Michigan. In Canada: Addison Industries, Limited, Toronto, Ontario.

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Ask Your Jobber for
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HASCO, INC. If your jobber can't supply you, send
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ICE CUBE TRAY

...OR WALK-IN REFRIGERATOR

—consider what Alcoa Aluminum offers you

Aluminum has eye-appeal. A product made of Alcoa Aluminum—a single ice tray or an entire walk-in refrigerator—can be outstanding in appearance and have that clean and sanitary look.

Aluminum offers superior heat conducting properties, helping to speed chilling or ice making. It is highly resistant to corrosion, and

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Our engineers will assist in working Alcoa Aluminum into your products. For this help, call the nearby Alcoa office, or write ALUMINUM COMPANY OF AMERICA, 1975 Gulf Building, Pittsburgh 19, Pennsylvania.

ALCOA FIRST IN
ALUMINUM

Washer-Ironer Price Boost Factor Upped 1.8%

WASHINGTON, D. C.—An additional 1.8% has been added by OPA to the industry-wide reconversion price increase factor for manufacturers of household washers and ironers, bringing the total increase factor up to 9.5%, figured on manufacturers' prices as of 1941. The original reconversion increase factor was 7.7%.

The original factor was adjusted to allow for increases in labor costs which were not previously considered, explained OPA.

There will be no change in prices at the retail level as a result of this increase to manufacturers, according to OPA. Prices to consumers are held at March, 1942, levels.

OPA declared that the washing machine and ironer industry was one of the first to receive a reconversion price factor, and that afterwards the agency had "somewhat liberalized" its method of calculating basic wage rate increases of factory workers.

Bush Mfg. Co.--

(Concluded from Page 1, Column 5)
lative prior preferred and 10,000 shares of \$5 par value common.

Underwriters are headed by Lee Higginson Corp. of New York City and Chas. W. Scranton & Co. of New Haven, who will publicly offer the preferred at \$25 a share and common at \$10 a share.

In addition, the underwriters have sold to Yale university, in a private sale, \$300,000 worth of 4% debentures due April, 1958, and also filed registration for 15,000 warrants providing for purchase of common stock at a later date.

To handle the expanded demand for the unit coolers, evaporators, and condensers which it makes, Bush is planning to build a plant with 110,000 sq. ft. of floor space on South St., West Hartford, which will house operations now concentrated in the old Pratt & Whitney building on Capitol Ave., and in the old New Departure building on New Britain Ave., West Hartford. The new structure would also house offices of the company.

The Bush building on Wellington St. will continue to be used for manufacturing purposes, according to plans.

Of the proceeds from the new financing, it is estimated that about \$650,000 will be required for the new plant and expense of moving operations, and the remainder to be added to working capital.

The company has applied to the Civilian Production Administration for authority to proceed with construction of the plant.

7 Kelvinator, 4 Leonard Refrigerator Models Get Wholesale, 'Extra' Prices

DETROIT—Approval of wholesale prices and extra charges permitted for sales of seven Kelvinator and four Leonard refrigerators was recently granted by OPA in Order 14, MPR 598.

The prices, including the federal excise tax, follow:

Model No.	KELVINATOR Ceiling Prices for Sales to Dealers Who Buy—		
	In Carload Lots	On Split Car Basis	From Distributor's Warehouse
C-3	\$ 81.54	\$ 82.76	\$ 86.19
CF-3	85.14	86.30	89.86
C-4	87.83	89.09	92.70
CB-6	86.56	87.71	91.26
M-7	128.86	131.85	141.45
C-9	128.93	131.92	141.52
MM-9	169.10	174.50	187.25

Model No.	LEONARD Ceiling Prices for Sales to Dealers Who Buy—		
	In Carload Lots	On Split Car Basis	From Distributor's Warehouse
LB-6	\$ 86.56	\$ 87.71	\$ 91.26
LH-7	128.86	131.85	141.45
L-9	128.93	131.92	141.52
HL-9	169.10	174.50	187.25

(Ceiling prices on sales by distributors to dealers of the following models were issued last fall in Order 4, MPR 598: Kelvinator—CS-7, C-7, CD-7, M-9; Leonard—SL-7, L-7, DL-7, LH-9.)

If a distributor provides the consumer with delivery, installation, and first-year service on behalf of a dealer, he may add the following charges, separately stated, per unit.

Kelvinator	Leonard	Each
C-3		\$ 8.34
CF-3		8.69
C-4		8.08
CB-6	LB-6	8.69
M-7	LH-7	10.95
C-9	L-9	10.95
MM-9	HL-9	13.05

If a distributor, at the request of a dealer, provides the consumer with "whatever is necessary to meet the four-year warranty," he may make an additional charge of \$5 for each refrigerator. This charge must be separately stated.

For a refrigerator equipped with a left hand door, a charge of \$2.50 may be added.

OPA issued the following rules on freight charges:

"Purchases in carload lots are f.o.b. purchaser's city.

"Purchases on a split car basis are subject to an additional charge (which must be separately stated on the seller's invoice) for switching and other freight charges in excess of the carload freight charged.

"Purchases from the distributor's warehouse are f.o.b. distributor's warehouse except that any freight costs incurred in connection with a delivery to the dealer in excess of \$.50 per hundredweight shall be paid by the distributor."

Workers Return to Dole After 11-Week Strike

CHICAGO—Dole Refrigerating Co. here, manufacturer of cold plates, has reported the return of their shop employes April 1 after a strike of almost 11 weeks. The plant returned to full operation immediately, company officials stated.

PURO ELECTRIC
WATER
COOLERS

BRANCHES
IN PRINCIPAL CITIES

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New York 3, N. Y.

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Lynch Mfg. Appoints 2 District Sales Heads



B. J. SCHOLL



CAL PIERCE

Scholl & Pierce Join Lynch Sales Staff

TOLEDO—R. L. Sears, sales manager, Lynch Mfg. Corp., last week announced the appointment of two new district sales managers, B. J. Scholl and Cal Pierce.

Mr. Scholl will handle sales of Par refrigeration and air compressors for the district comprising the lower peninsula of Michigan, Indiana, Ohio, Pennsylvania, West Virginia, southern half of New Jersey, Maryland, Delaware, and the District of Columbia. Mr. Pierce will have the territory embracing Kentucky, Virginia, North and South Carolina, eastern Tennessee, Alabama, Georgia, and Florida.

Mr. Scholl was formerly with Brunner Mfg. Co. for 28 years, several years of which he served as general sales manager. Mr. Pierce, prior to the war was a manufacturers' agent for several lines including the Par units. He served in the U. S. Armed Forces for more than three years.

Easy Resumes Assembly; Idle Since Jan. 31

SYRACUSE, N. Y.—The assembly line at Easy Washing Machine Corp. shut down Jan. 31 because of material shortage due to the steel strike. has resumed operation with employees returning on a staggered basis.

The bottleneck resulted from lack of tubs, now being trucked in daily from Ohio. During the period of curtailed operations, reconversion plans were completed. In some cases, aluminum will be substituted for steel.

NATIONAL OIL HEAT EXPOSITION and CONVENTION**APRIL 23-27... Sponsored by Oil-Heat Institute of America****ON TO PHILADELPHIA...****"a get-together that means all-together
for a new day in oil heat"**

Gentlemen:

The Oil Heating Industry owes a debt of gratitude to Exhibitors in the forthcoming National Oil Heat Exposition. They have made the Industry's first post-war show the greatest of all Oil Heating Expositions so successfully sponsored by Oil-Heat Institute of America.

This display of confidence in the future of our vital industry has been exhibited in the face of difficult reconversion problems. It is a stirring tribute to the calibre of the men and women in this Industry and is a happy augury as we enter an era of peace, a new day for Oil Heat, a period of great expansion.

The mission of OHI is to increase public knowledge and acceptance of Oil Heat. OHI accepts the mandate given it to make the Exposition and Annual Convention, held along with the Exposition, further the welfare of the Industry as a whole.

OHI's Annual Convention—its Retail Sales, "The Industry Looks at Itself" and Engineering Sessions, its Annual Banquet-Dance, its good-fellowship, and its many other opportunities for discussion of Oil Heating—is dedicated to this purpose: The welfare of the entire Oil Heating Industry.

So, as sponsor and host, OHI extends to all—to manufacturers of Oil Heating Equipment and Accessories, to Dealers, to Oil and other Allied Industries, and to their ladies—to the whole Industry-Family, whether Exhibitors or not, whether OHI members or not—a cordial invitation to join in this GET-TOGETHER that means ALL-TOGETHER for the Oil Heating Industry.

OHI especially invites you to bring your wives that they may enjoy a visit to historic Philadelphia and environs. There will be a special Ladies' Day program on Wednesday, April 24. The ladies will not want to miss the famous entertainers and name band at the Banquet and the dancing that follows.

We'll see you in Philadelphia, April 23-27.

Sincerely yours,



President

**OIL-HEAT INSTITUTE OF AMERICA**

INCORPORATED

30 ROCKEFELLER PLAZA • NEW YORK 20**MORE PEOPLE HEAT WITH OIL
LESS COST . . . NO TOIL**

VEGETAIRE

time-tested Self-Serve Produce Display

Sherer's Self-Serve VEGETAIRE offers merchants efficiency and dependability . . . triples display area . . . generous refrigerated storage space. It boosts sales and profits for them.

One member of a complete quality line . . . designed to be salable in volume at a profit.



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Have You Ordered Your Copy of the 1946
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When it Trips ... it GRIPS

HOW IT WORKS



In this cutaway view, the handle has been pulled to open the door. This lowers the trigger (a), made in one piece with the lock (b). A metal plate (c) rests in a notch of the spring-actuated bolt (d) and keeps the trigger cocked.

HOW IT HOLDS

To trip the trigger, close the door. The bolt yields just enough to swing the plate past center. Now it exerts its power horizontally on the catch—a bulldog grip that never eases up.



Manufacturing a full line
of hardware for
commercial refrigeration

Grand Rapids Brass Company

Makers of Dependable Refrigerator Hardware for over 40 Years

Grand Rapids 1, Michigan

The 'Frostmaster' Plan

Dep't Store Frozen Food Merchandising Charted by Syracuse Pilot Operation

By John Sweet

SYRACUSE, N. Y.—Under the "Frostmaster" plan for integrated department store frozen food merchandising, tested in this city since July, 1944, sales of frozen foods are averaging more than \$200 a family a year—compared to a national average of \$5-\$6—and charge accounts are averaging twice the normal figure.

This and other evidence was presented at the first annual meeting of the Frozen Food Foundation, Inc., held here March 28-30, to support the proposal that the "Frostmaster" plan is "a ticket back to a field in which the department stores were once important factors: the distribution of food to the American home." The meeting was staged in the Frozen Food building in collaboration with Frozen Food Products, Inc., originator of the plan.

Through talks and displays, visitors learned that the "Frostmaster" plan consists mainly of two phases, described as follows:

"1. An over-the-counter frozen food section in the department store itself, operating through specially developed selling methods and equipment.

"2. A home-delivery frozen food service to customers having adequate frozen food storage space. This home-delivery service is operated out of off-premise distribution facilities located in low-rent neighborhoods."

Competition With Grocers

Aim of the home-delivery phase, it was pointed out, is not only to slash operation and occupancy costs through decentralized distribution but to provide "in the home competition" to "in the neighborhood grocer."

In addition to the merchandising techniques, other factors of the plan involve equipment and scientific controls. Some of the equipment necessary for the food service is being produced by The Aviation Corp. and Carrier Corp., members of the Foundation.

On display at the meeting were these products:

—The newly developed, 3-cu. ft. "Frostmaster" home storage cabinet manufactured by Aviation, through its subsidiary, The Crosley Corp. Designed to hold up to 120 lbs. of frozen food, the chest-type cabinet is said to maintain 0 to 4° constant temperature and operate at about \$1 a month on a metered basis.

—A retail counter cabinet of 20-cu. ft. capacity holding 800 packages of food. This case is manufactured under the "Frostmaster" label by Refrigeration Corp. of America. Illuminated kodachrome pictures of frozen products were displayed across one cabinet to show an effective merchandising touch.

—A 30 cu. ft. forward reserve stock cabinet manufactured by Carrier Corp. and designed to hold 1,000 lbs. of frozen foods on refrigerated shelves.

Delivery Truck Designed

—A specially designed refrigerated delivery truck manufactured by Montpelier (Ohio) Body Co. Fourteen-hour compressor time is said to provide a 10-hour delivery period at 0 to 10°. The truck, of 250-cu. ft. capacity, is described as holding 2,500 lbs. of frozen food.

—An apartment-house, sectional-type locker containing 20 3-cu. ft. individual lockers of 120-lb. capacity each. Overall capacity is given as 2,400 lbs.

Some stores are planning to rent the storage cabinets to users of their home-delivery service, some contemplating installing and renting apartment lockers, and some may freeze their own specialties.

Other equipment on display was a 38-cu. ft. order-filling cabinet holding 1,140 lbs. of food; a 336-sq. ft. bulk cold storage room holding 40,000 lbs. of food; and a Carrier condensing unit, Type 5F40.

Provision of scientific controls for the "Frostmaster" plan is the purpose of the Frozen Food Foundation. It is a research and service organization aimed at guiding "Frostmaster" department stores in obtaining top-grade products.

The "Frostmaster" plan, it was explained, was conceived in 1943 by

Paul Mazur, an investment banker and retailing expert who was struck by the fact that although department stores were the major sellers of household goods, they were practically out of the food picture. He observed that 40 to 50 cents out of each retail dollar was being spent for food, but that only 1/10 of a cent's worth was purchased in department stores.

Aware that about \$250 million is spent annually at retail for frozen foods and that the factors which had prevented food from being an important department store activity were overcome by frozen foods, Mr. Mazur reasoned that a sizeable volume could be realized from only a small part of the entire frozen food potential.

The Plan Takes Shape

With these facts in mind, he got together with Carrier Corp. and The Aviation Corp. to form Frozen Food Products, Inc., for development and testing of a department store frozen food merchandising plan. Guidance along practical department store lines was provided by Allied Stores Corp.

Carrier at first concentrated on working out a home freezer to be used as part of the plan, and then turned to other types of refrigeration equipment. Aviation took over mass-production of the freezer.

Next followed two years of development under the direction of George W. Meek, a consulting engineer who was then head of Frozen Food Products.

The plan was first put into actual operation in Carrier's Syracuse plant as an over-the-counter frozen food business and served mainly Carrier employees. Later, the pilot home-delivery operation was inaugurated when WPB authorized construction of 240 "Frostmaster" cabinets.

Using these cabinets, plus 60 already owned by Syracuse families, sponsors of the plan carefully selected a group of Syracuse homes to reflect a representative cross-section of incomes, occupations, and family sizes and delivery areas so devised as to permit "saturated" selling. The latter part of last year, the pilot plant was turned over to Dey Bros. & Co., an Allied Stores Corp. affiliate.

Results of Experiment

This pilot operation has produced the following results, according to the Foundation:

"1. Although average U. S. consumption of frozen foods is running around \$5 or \$6 per family per year, sales . . . under the 'Frostmaster' plan are running over \$200 per family per year, despite a still restricted supply situation and relatively limited varieties.

"2. Although a high average department store charge account runs about \$75 to \$100 a year, the 'Frostmaster' plan has produced charge accounts averaging over twice that figure.

"3. Contrasting with the \$50 to \$80 of high average sales per square foot of department store selling space, 'Frostmaster' over-counter frozen food volume approaches an annual figure of \$200 per square foot.

"4. Use of the . . . service has reduced time . . . for food shopping, preparation, and cooking by four to six hours weekly . . .

"5. Less than 2% of families in the pilot experiment requested discontinuance . . .

"6. Casual news of the pilot operation created a spontaneous demand from 1,200 (persons) . . .

"7. Average sales check per home-delivery family is running in excess of \$5 and deliveries are made once every 10 days, on the average. Delivery expenses are low enough to permit their absorption in normal operating overhead, thereby placing 'Frostmaster' home-delivery prices on a competitive basis with prices in 'cash-and-carry' stores."

Thirty per cent of the sales volume was said to be in the high mark-up products, such as ice cream, bakery goods, and prepared foods.

(Concluded on next page)

\$11 Billion Potential Frozen Food Market Eyed by Nation's Department Stores

(Concluded from preceding page)

Seventy per cent of the participating families were in the \$4,000-\$6,000 income group, it was pointed out.

The operation was pictured as establishing the following potential for the Syracuse market with its 200,000 population:

A yearly food sales per family when full assortment offered—\$300.

Cabinet sales: 2,100 (1,200 from waiting list)—\$241,500.

Food sales: store over-the-counter department—\$100,000; to "Frostmaster" cabinet owners—\$630,000; to non-"Frostmaster" cabinet owners—\$100,000. Total sustained yearly food sales volume—\$830,000.

Total "integrated" sales volume—\$1,071,500.

Membership of Foundation

In the spring of 1945, the Frozen Food Foundation was established under the technical direction of Gerald A. Fitzgerald, frozen food specialist once associated with Clarence Birdseye. It is underwritten by a present membership of more than 50 U. S. and Canadian department stores and equipment manufacturers, including 29 Allied Stores Corp. affiliates, five R. H. Macy affiliates, two Marshall Field affiliates, three May Co. affiliates, T. Eaton Co. in Toronto, 13 other stores, and the three non-store organizations, Carrier, Aviation, and Frozen Food Products.

Called a "bureau of standards" for member stores, the Foundation carries out the following projects through its staff of technicians from various universities and industrial organizations:

"1. Formulation of frozen food quality standards, and cooperative work with packers to gain adherence to these standards.

"2. Improvement of present staple frozen food items, and development of new products which lend themselves to freezing.

"3. Research into physical and chemical phenomena attending the freezing of prepared foods . . .

"4. Improvement of plant equipment and processes through bacteriological research.

"5. Basic research into the nutritive aspects of frozen foods, and application of these findings to improve processing, distribution, and home preparation methods.

"6. Study of packaging materials and design, and through cooperative work with packaging industries, the development of improved frozen food containers.

"7. Preparation of recipes, menus, defrosting methods, and other material for consumers.

"8. Developing scientific background data for use by department store home economists, demonstrators, and sales personnel."

Display Explains Operation

A feature of the meeting was a display called "Blueprints for Better Living." By pictures and charts, this display traced the growth of frozen foods into an industry with a \$11 billion potential and showed the origin, equipment, techniques, and scientific controls of the "Frostmaster" system. A large part of the display was given over to portraying results of the pilot plant operation, itself a part of the exhibit.

One section of "Blueprints" pictured the three-year evolution of the "Frostmaster" home storage cabinet, starting with the completion of 32 design studies. The displayed showed these field test models: 1943 unit, 2.2 cu. ft., nine built; 1944 unit, 2.3 cu. ft., 42 built; 1945 unit, 3.1 cu. ft., 206 built.

Another section reviewed the reasons why department stores have avoided the food business and why frozen foods open up a new market for them.

It was explained that food had been largely ignored because: high unit sale items were not packaged; the large assortment of items required; operation was unprofitable because of high occupancy and operating costs; and loss through spoilage. But since 60% of all food can be frozen and because frozen food overcomes the disadvantages of ordinary food, this market affords a huge

potential for the department store, visitors were told.

The following display contrasted the small risk involved in expanding through the "Frostmaster" plan to the potentially costly expansion of the store itself. It was suggested that the department store owner could use the "Frostmaster" "step by step" decentralization system in this way:

"I can set up a small department (1,000 sq. ft. @ \$2.50) in the store and rent 1,500 sq. ft. of low cost (50 cents) warehouse space. Total rental cost: \$3,250. If unsuccessful, I stop with little loss.

"If successful, I open a chain of distribution plants (one at a time). Seven plants would yield me: sales volume—\$1,040,000; yearly occupancy cost—store (1,000 @ \$2.50), \$2,500 and plant (7,000 @ 50 cents), \$3,500, total \$6,000; sales per sq. ft. of store selling space used—\$1,040.

"If I am more successful than anticipated, I can continue to open decentralized plants."

Representatives of present Foundation members attended the opening session of the meeting. Speakers included Dr. Donald K. Tressler, special consultant to the Foundation; H. E. Babcock, agricultural expert; and William Burston, food executive of Allied Stores Corp.

The second day was given over to department store representatives from non-competitive areas. Representatives of firms in the frozen food processing, packaging, equipment, and research fields were guests at the last session, along with trade and general press representatives.

Speaking at the opening meeting, Mr. Burston emphasized that frozen foods are a department store business. He pointed out the department stores are not invading the field but are "merely staking out larger claims in a field that once was very much our own."

"The frozen food business is a packaged business, and the department store business is a packaged business. The frozen food business requires special housing, to be sure,

but special housing imposes no problem foreign to a department store.

"The frozen food business makes use of present available services—charge account, delivery, breadth of assortment, selling aids. And these services, fortified by merchandising methods that have built an unshakable following for the department store, should give us a hold on this business that we can keep, and enlarge, and profit from."

Saying that the storage cabinet is "for us the door to profitable volume, Mr. Burston predicted that "when frozen foods eventually become economical, as they must, and mass production as well makes the home storage cabinet as common as the household electric refrigerator—the volume we now plan will be pennies and we'll have a business more solidly tying us to our customers and them to us than any the department store operates."

Mr. Babcock, discussing "The Ever-Normal Refrigerator," told his listeners that "the refrigerator and frozen food industries make perhaps the greatest contribution to a forward-looking national food program."

"It goes without saying that a diet based on fresh milk, and meat, and eggs, and fresh fruits and vegetables is impossible without the availability of low temperature storage," he commented. "In other words, the diet of the American people can be improved only as rapidly as universal cold and zero storage is available.

Mr. Babcock called the discovery of food preservation by freezing and storage one of the most far reaching of modern times. This art, he said, "offers to the American people the possibility of the kind of diet the nutritionists say is best for them every day of the year."

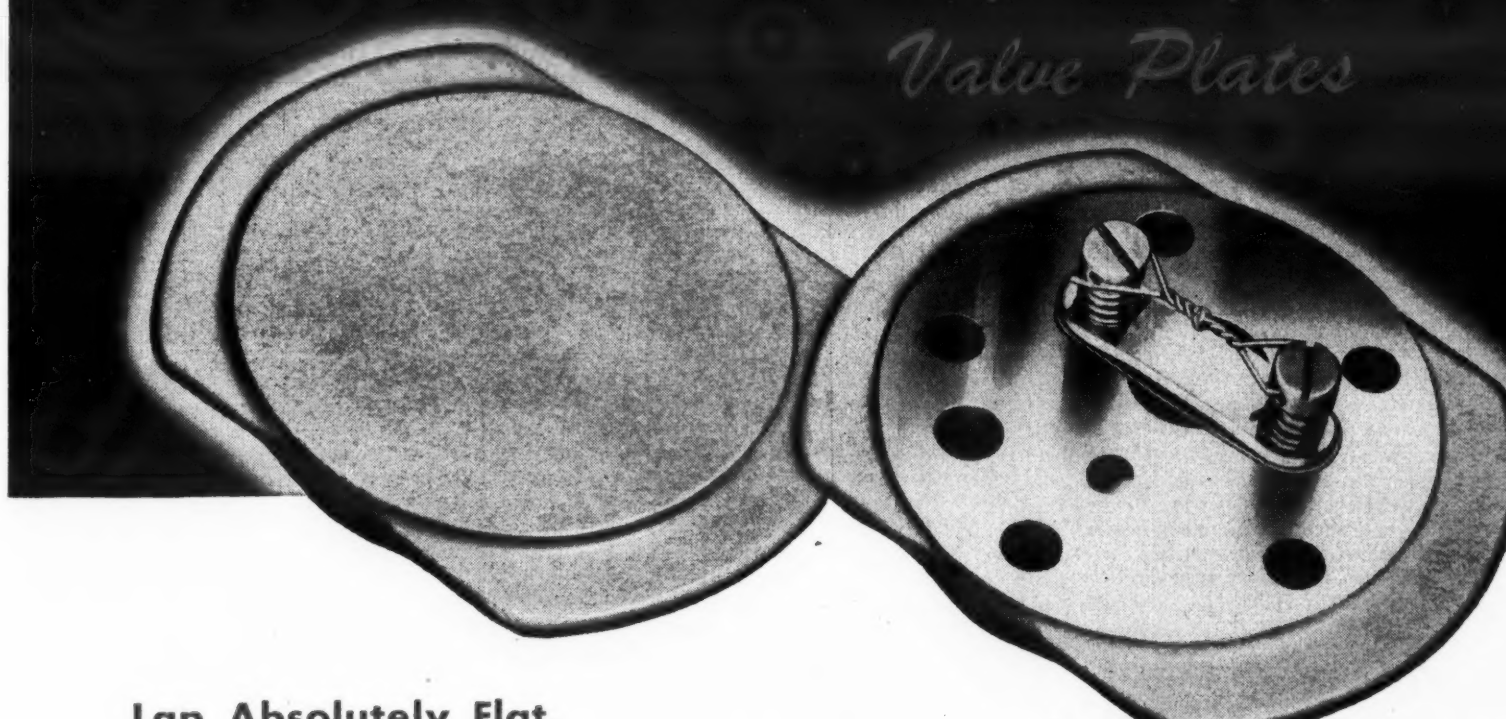
He paid tribute to the Foundation and Frozen Food Products, calling them "pace-setters in human welfare."

Discussing recent technological advances in frozen foods, Dr. Tressler predicted even greater future progress if quality and product research are maintained.

"Methods of preparing and freezing goods which cannot now be preserved in this way will be invented," he said. "It will not be long before freezing will be the most important method of preserving perishable foods."

EATON PERMANENT MOLD GRAY IRON CASTINGS

Provide Ideal Qualities for Refrigeration Value Plates



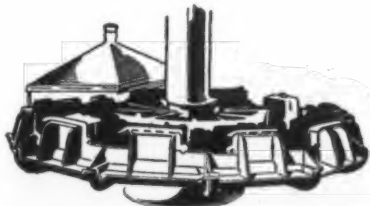
Lap Absolutely Flat.

Free from Distortion.

Insure Perfect Seal-Face, due to Dense, Homogeneous Structure.

Provide for Free Machinability.

WHEREVER a dense, close grained structure, freedom from distortion, and perfect finish are essential, Eaton Permanent Mold Gray Iron Castings fit the specifications exactly. Their free machinability insures minimum production cost and minimum scrap loss.



THE EATON PERMANENT MOLD MACHINE IS A SYMBOL OF THE QUALITY OF GRAY IRON CASTINGS PRODUCED BY THE PERMANENT MOLD PROCESS.

Millions of Eaton Permanent Mold Gray Iron Castings are used annually in the domestic appliance industries including such critical parts as refrigeration valve plates, pistons, connecting rods, crankshafts, cylinder blocks, cylinder heads, pump bodies, and many others.

There are undoubtedly parts in your own production which could be made better, by using Eaton Permanent Mold Gray Iron Castings.

A copy of the illustrated booklet, "The Eaton Permanent Mold Process," explaining the process in detail and showing examples of productive Permanent Mold Gray Iron Castings will be gladly mailed upon request.

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EATON

MANUFACTURING COMPANY
FOUNDRY DIVISION

9721 French Road • Detroit 13, Michigan

'Billboard' Wall and New Display Window

A large parking lot adjacent to his newly-purchased appliance shop provided Henry Wall, Valley Appliance Co. head, with an opportunity to engage in the direct advertising and display of his merchandise to passing patrons of a nearby supermarket. Before long he had covered the entire wall with bold lettering which advertised the services his firm had to offer. He also installed the 11 ft. display window shown at right, all of which, he says, has increased consumer interest in his establishment.



Dealer Capitalizes on Adjacent Parking Lot to Advertise Appliance Services

FRESNO, Calif. — When Henry Wall, head of Valley Appliance Co. here, bought the building in which his appliance sales and service business is located, a major reason for the choice was a blank wall which faces on a huge parking lot.

The store is strictly of the "neighborhood" type, but is located next to a large food supermarket, and separated from it by a parking lot. "This gave me a chance to use the side wall as an immense billboard listing all our services and merchandise where we're certain that the family type of prospect will read it," Mr. Wall grinned, "therefore, the first thing we did when converting the building for appliance sales was to paint the wall a flat white, and began listing off our various lines."

The building wall lists all told 10 services of the firm, 14 brands of home appliances, as well as naming each home appliance carried in stock.

Lettering is "bold as brass" in either red or black against the flat white background, and is all raised above automobile windshield level where any supermarket customer parking his car is bound to see it.

Another idea which has brought this aggressive dealer many new customers was installing the window shown on the left front of the building, facing directly into the parking lot. Finding that there were still many supermarket visitors who didn't read his emblazoned wall advertising, Mr. Wall spent \$400 in cutting away the space and installing an 11 ft. display window. This is kept filled with small appliances, radios, housewares, and china sidelines.

"A lot of women come in after a look at the window display and tell us that they had no idea that we were an appliance store, even after parking in the supermarket lot dozens of times," Mr. Wall pointed out.

Bortnick Named to New Post with Rosen & Co.

PHILADELPHIA — Harry Bortnick, former newspaper reporter and correspondent for various national publications, has been appointed general advertising and sales promotion manager for Raymond Rosen & Co., distributor of Kelvinator refrigerators, Bendix automatic washers, and other appliances. In his new position Mr. Bortnick will be responsible for advertising and sales promotion in eastern Pennsylvania, southern New Jersey, and Delaware.

Mr. Bortnick, who studied at University of Pennsylvania, has just completed three years in the Army.

Domestic Laundry Driers Included Under OPA Washer Order

WASHINGTON, D. C. — Domestic laundry driers have been placed under the domestic washing machine order MPR-86, which also covers ironers, announces OPA.

No reconversion price increase factor for driers is included in the order, since the survey of the industry at the time the order was issued did not include driers.

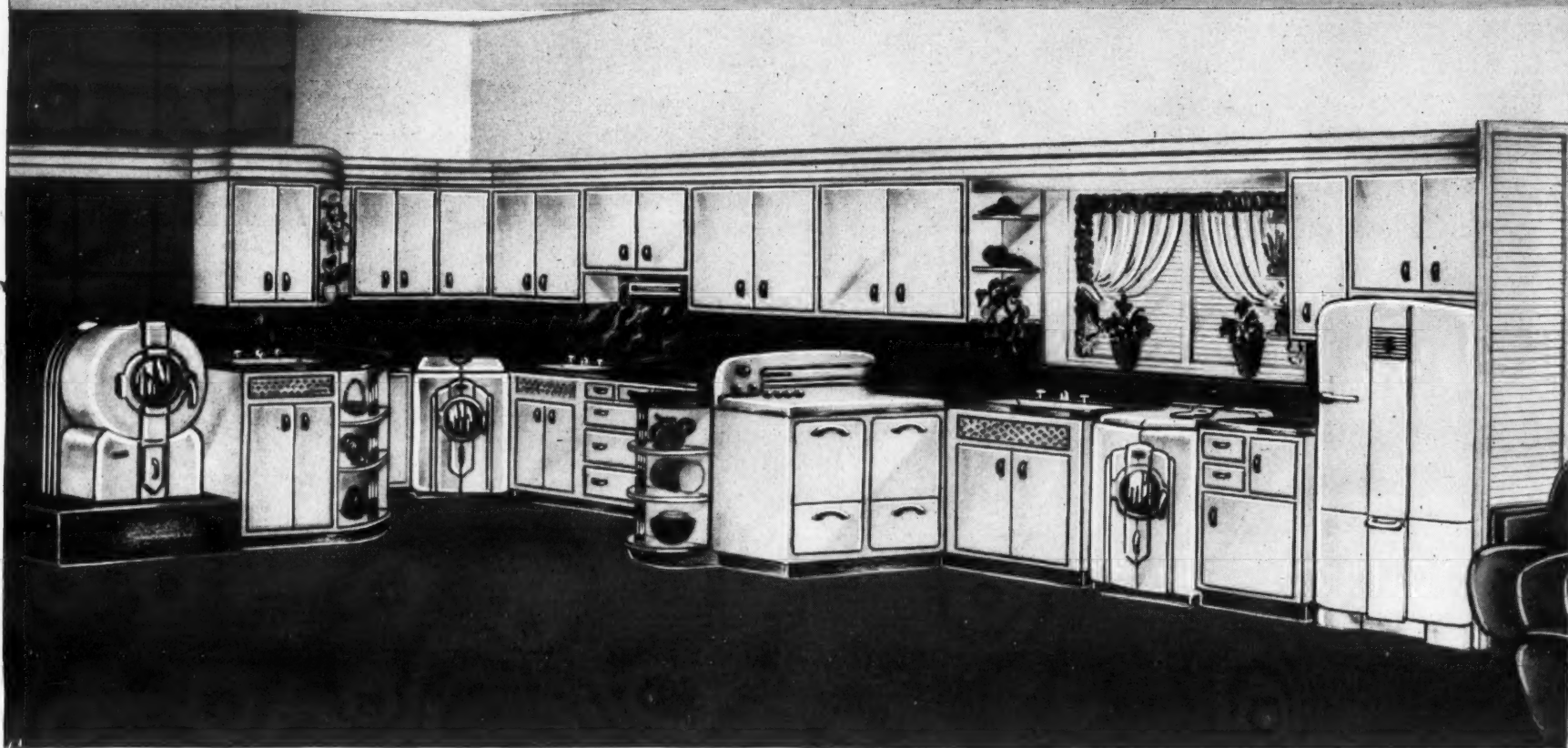
OPA has indicated that a price increase factor will be issued for the drier industry if one is necessary.

G-E Ironer Ceiling Set

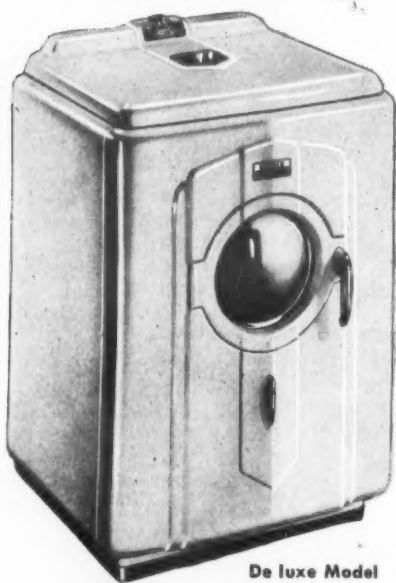
BRIDGEPORT, Conn. — Maximum retail price of Model AR-17 ironing machine manufactured by General Electric Co. here was set at \$32.55 by OPA Order 52, MPR 86.

The General Electric Co. is authorized to determine its ceiling price in accordance with Sections 3 and 5 of MPR 86, except that an increase of 56 cents is allowed on sales of Model AR-17 ironer; while distributor prices to dealers are to be established in accordance with Section 15 of MPR 86, with the legal addition of 56 cents.

How Bendix Dealers Benefit from the BENDIX HOME LAUNDRY INSTITUTE!



Another BENDIX "plus"—Devoted to Home Laundry Planning and Procedure—Research and Demonstration!



De luxe Model

The BENDIX Home Laundry Institute is not only conducted for practical research and educational purposes, but also for the purpose of assisting dealers to make more and better sales.

Training Material for home service directors on new laundering methods and procedures is available—as well as the latest facts on washing, ironing, soaps, detergents, bleaches, starches, etc.

To date, 79 distributor home service directors, and approximately 1500 certified specialists have been trained to conduct post-sale demonstrations in the home.

The Institute works hand-in-hand with the engineers and chemists of the Bendix engineering laboratory—and maintains close contact with manufacturers of related laundry products—with colleges and universities—with public utility and department store home economists—with the household equipment editors of the leading national magazines.

All of these activities and services help Bendix Home Appliance dealers in one way or another—all of them contribute to the already overwhelming public preference for the Bendix automatic "Washer."

So far as we know, no other company offers so complete and so helpful a service to its dealers.

BENDIX automatic Home Laundry

Bendix Home Appliances, Inc., South Bend, Ind... Pioneers and Perfectors of the automatic "Washer."

WATER COOLERS WITHOUT PRIORITY



Glass filler coolers for cafeterias; bubbler coolers for offices, stores, factories; and commercial coolers for all applications... available without priority. Complete range of models and sizes.

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Plan your automatic refrigeration installations for a triple advantage: Proved performance, low first cost, low maintenance cost. LIPMAN machines for dependable service in any field of commercial refrigeration are the result of more than a quarter century of manufacturing know-how. Let LIPMAN serve your needs profitably!
GENERAL REFRIGERATION DIVISION



Inside Dope

By George F. Taubeneck

(Concluded from Page 1, Column 1)

In 1945, after the Union Agent's demand:

*10 baskets of 50 apples each at 3¢ per apple	\$15.00
Pete's wages—8 hrs. x \$2 per hr.	\$16.00
Cost of baskets and marketing	2.75 18.75

Uncle John would lose each day \$3.75

Uncle John asked the OPA to raise the price of each apple from 3 cents to 4 cents, which would give him a profit of \$1.25 per day instead of a loss of \$3.75 per day.

The OPA investigated carefully because it didn't want any inflation in the apple business, and finally agreed to allow Uncle John to raise the price of each apple to 3½ cents (provided Uncle John made a satisfactory deal with Pete) which meant that Uncle John would only lose \$1.25 per day.

When Uncle John refused to accept the 3½ cent price per apple and pay Pete \$2 an hour, the Union Agent said Pete had better strike since it was obvious Uncle John was out to smash the Union.

Uncle John said all he wanted to do was to make a fair profit, and it was O.K. with him if Pete stayed in the Union.

Then the Union Agent went to Washington and told the Government to force Uncle John to pay Pete \$2 an hour, and the Government called Uncle John to Washington and told him that he ought to pay Pete at least \$1.85 per hour.

In 1945, after the Government stepped in:

*10 baskets of 50 apples each at 3½¢ per apple	\$17.50
Pete's wages—8 hrs. x \$1.85 per hr.	\$14.80
Cost of baskets and marketing	2.75 17.55

So Uncle John would only lose each day \$.05

But Uncle John held out for paying Pete \$1.80 an hour instead of \$1.85

an hour which was only a difference to Pete of 5 cents an hour, but it meant that Uncle John could make a profit of 35 cents per day, before taxes (provided Pete went back to picking 10 baskets a day) instead of losing 5 cents per day.

Both the Government and the Union Agent said that if Uncle John was going to quibble about paying a lousy 5 cents per hour it certainly showed that Uncle John was anti-labor and was out to wreck the Country.

Uncle John said that he was probably old fashioned, but that he didn't see how he could hire Pete very long if he lost money every day that he did hire him.

At midnight (because strikes usually start at midnight) Pete went out on strike.

The apples lay on the ground until they rotted.

Neither Uncle John nor Pete made any money.

A lot of people began to say they liked oranges as well as apples.

Pete and the Union Agent went down to Florida to see about that!

P.S. Uncle John's problem is no different than ours—Republic Steel Corp.

*NOTE—Actually this figure of 10 baskets a day is inaccurate, for, after Pete joined the Union in 1942 his daily production dropped to eight and even five baskets a day. However, Uncle John was not permitted to introduce this evidence into the wage discussion since the Union maintained that Pete could produce 10 baskets a day IF he felt like it.

ASHVE Meeting Includes St. Lawrence Cruise

NEW YORK CITY—The semi-annual meeting of the American Society of Heating & Ventilating Engineers will be held June 10, 11, and 12, in Montreal, Canada, with the Montreal Chapter members acting as hosts.

The meeting will open at the Mount Royal Hotel and will continue aboard the cruise ship *Quebec* up the St. Lawrence with stops at Quebec, Murray Bay, and Tadoussac.

Alfred J. Offner, president of the Society, has been advised by A. B. Madden, president of the Montreal Chapter, that F. A. Hamlet will act as general chairman of the committee on arrangements, Leo Garneau as vice chairman, and S. W. Salter, secretary.

It is planned to have three business and technical sessions, and in advance of the sessions there will be a meeting of the Council. In addition to the meeting of the Committee on Research there will be a number of meetings of the Technical Advisory Committees.

Special reservation forms for the cruise will go out to members, and requests for hotel rooms should be filed promptly where overnight accommodations are desired. Train reservations should be made as soon after April 27 as possible. Special cars will be available from both the eastern and western cities.

Members traveling by rail will reach Montreal over the two trans-continental systems, the Canadian National and Canadian Pacific.

Norge Portable Cooler Gets \$109.95 OPA Price

DETROIT—A retail ceiling of \$109.95 was recently established by OPA for a portable water cooler manufactured by Norge Division of Borg-Warner Corp. On sales to distributors, the ceiling is \$54.57; to dealers, it is \$68.17.

These prices were established by Order 347, MPR 591.

Electronic Engineering Gets Price for Walk-in

SPOKANE, Wash.—A complete walk-in refrigerator, Model No. 110, manufactured by Electronic Engineering, Inc., will retail at \$1,250 under OPA Order 357, MPR 591. On sales to dealers the ceiling was set at \$833.40. The prices include compressor and coil.

Returns to Mills



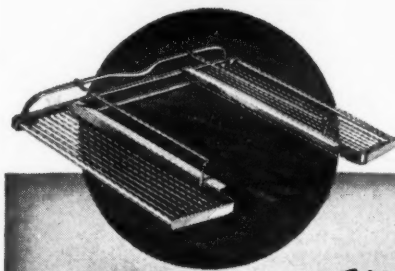
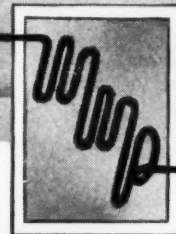
HILLIS IAMS

Iams Heads Mills Sales In Eastern Territory

CHICAGO—Harrison J. Hedrick, manager of the Refrigeration Division of Mills Industries, Inc., announces the appointment of Hillis Iams to the position of district sales manager, Refrigeration Division, eastern branch.

Mr. Iams served with Mills as field engineer and district sales manager from 1936 to 1944. In 1945 he became president of the Supply Distributors Corp., Boston.

THE CHOICE FOR A LIFETIME: STAINLESS STEEL REFRIGERATOR SHELVES



WALL WIRE PRODUCTS COMPANY

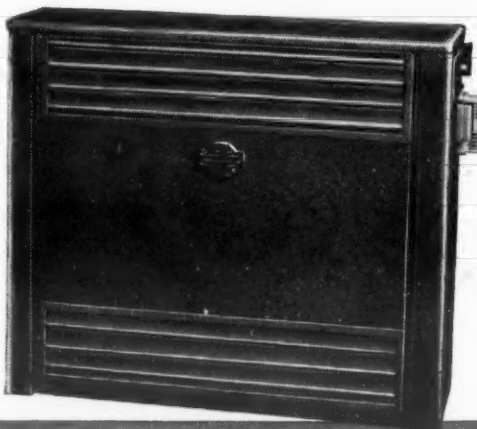
11333 GENERAL DRIVE
PLYMOUTH, MICHIGAN

Makers of STAINLESS STEEL AND
RETIRED REFRIGERATOR SHELVES AND WELDED WIRE PRODUCTS

SENSATIONAL NEW DEVELOPMENT IN AIR-CONDITIONING

AMCOIL Comfortaire Conditioner

Patents Pending



JUST ORDER FROM
A SIMPLIFIED CHART
AND INSTALL

AVAILABLE FOR IMMEDIATE
DELIVERY
INVESTIGATE: WRITE FOR
BULLETIN AC-2 TODAY!

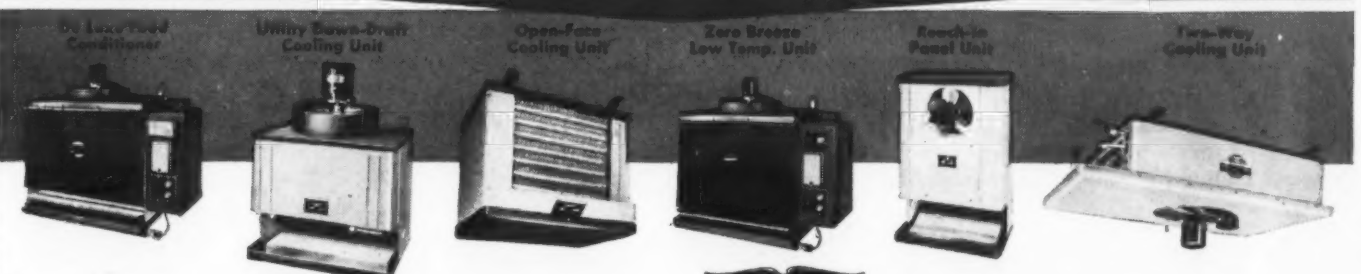
IT'S REVOLUTIONARY

Get this literature! You can't be up-to-date on air-conditioning without it. The AMCOIL COMFORTAIRE CONDITIONER is really new and unique. Operates on a new development of the vapor-pressure principle! Requires only half the usual condensing unit capacity! Has positively demonstrated that it provides comfortable, healthful air conditioning for human comfort without that clammy overcooled feeling. AIR CONDITIONING AT ITS BEST.

NO "ENGINEERING" FOR YOU TO DO!

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Also... Fast-Moving Amcoil Refrigeration Units



MANUFACTURERS' REPRESENTATIVES

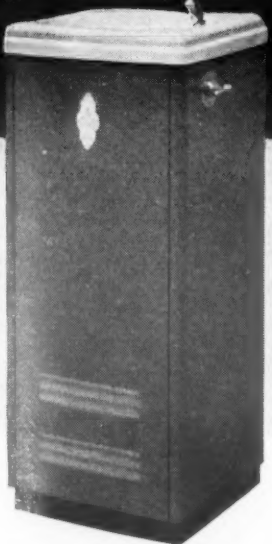
J. J. Madden, 212 Madison St., Dedham, Massachusetts
William D. Keefe, Chaffee, New York
E. J. Oliphant & Co., 505 Uhler Bldg., Marion, Ohio
Robbins-Greenwood Co., 3104 Main St., Houston 4, Texas
Jordy Engineering Co., Inc., 813 Howard Ave., New Orleans, La.
Ernest Darwin Corporation, P. O. Box 2654, Charlotte 1, North Carolina
A. J. Nelson Co., Box 2244, Denver, Colo.

Russell Sales Co., 1421 So. Broadway, Los Angeles 15, Cal.—1105 White Bldg., Seattle 1, Wash.

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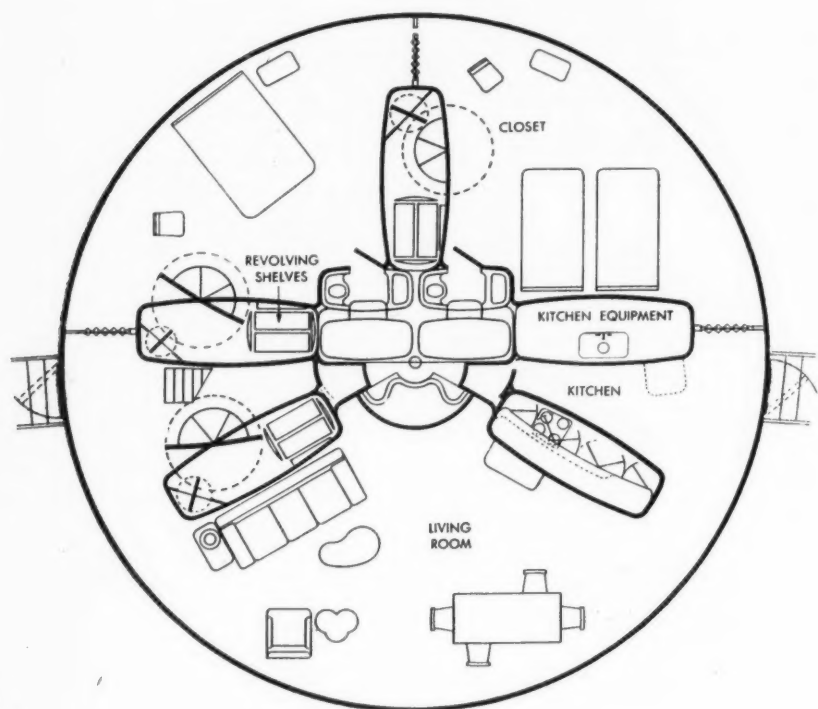
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Plans For Fuller House Specify All Appliances, Unusual Air Handling System

Plan of Circular House Showing Kitchen Partition



Floor plan shows radial pattern and wedge-shaped rooms. Partitions are hollow and can be used for various things, such as inserting of various kitchen appliances. Power, plumbing, and ventilation service accessories are grouped about the central mast.

Air Conditioning and Appliances Will Be Part of 'Package'

DETROIT—The Fuller house, the circular aluminum dwelling suspended from a steel mast, has been sensationally announced to sell for "\$6,500 or less completely equipped with all major appliances and year-around air conditioning equipment," but just what form the appliances and the air conditioning system will take has not been fully determined as yet.

In reply to inquiries from AIR CONDITIONING & REFRIGERATION NEWS an official of Fuller Houses, Inc., with headquarters at 420 West Douglas, Wichita, Kan., gave the following answers:

"Nationally known appliance manufacturers will furnish kitchen equipment for the house. All equipment will be built into space-conserving hollow partitions and arranged to save steps. From the floor plan you should be able to visualize kitchen arrangements.

"Specifications of the air conditioning systems—cooling, filtering, and humidifying—will not be available until completion of our testing. However, with a ventilator employing outside air motion to accelerate interior dynamic fountain motion it becomes an inexpensive feat to provide excellent air conditioning."

The Fuller house, which has re-

Photograph of a Scale Model in Landscaped Setting



This is a photograph of a precisely scaled model of the circular, suspended aluminum-and-Plexiglas Fuller house. That big vane on top is a ventilator which swings around with the wind, and changes the air in the house.

ceived considerable attention from the press and national magazines such as *Life*, and which some people see as one of the answers to the housing shortage, is a development of the "Dymaxion" dwelling which aroused great interest and speculation when first revealed by its creator R. Buckminster Fuller back in the twenties. (Mr. Fuller is now chairman of the board and chief engineer of the company.)

PLAN SALES BY DEALERS

Fuller houses will be distributed through a nation-wide organization of distributors and dealers "operating along the same general lines as sales organizations in the automobile industry." Local dealers are to maintain offices, display rooms, sales, service, erecting, and maintenance staffs.

Employing lightweight metals and plastics, aircraft production facilities and techniques will be employed in its construction. Initial production is to be undertaken by Beech Aircraft Corp. of Wichita.

Outside walls and roof of the dwelling are of aluminum, insulated with aluminum foil, and the whole house is circled by a fixed window of Plexiglas. Attached to the roof is a finlike ventilator that turns with the wind and is said to be capable of changing the air within the house every six minutes.

The kitchen of the Fuller house is scheduled to be equipped with an electric refrigerator, range, washer, clothes dryer, automatic dishwasher, and waste-disposal unit.

The Fuller house is 36 feet in diameter, 22 feet high. It weighs 8,000 pounds (4 tons) complete with floor, foundation, heating and lighting equipment, bathrooms, and storage partitions. A frame house with the equivalent amount of floor space is said to weigh at least 45 tons.

Rooms in this circular house are wedge-shaped. Wall surfaces, largely aluminum, may be painted or papered. Wall areas below the window sections are covered with colored Naugahyde plastic fabric.

SUSPENDED FROM A MAST

The entire house is suspended from

a single central mast of stainless steel or main compression member. The mast is constructed of seven hollow stainless steel tubes 18 feet high, total diameter 10 inches. It is claimed that the mast will easily support a weight of 125,000 pounds.

Three "compression rings"—the smallest located at the top of the mast, a second larger one half way down the roof, and the third and largest forming the perimeter of the base of the roof, connected to the mast by triangulated tension rods, provides what Fuller calls a compression-tension cage of great rigidity. In principle, he says, it may be compared to an Oriental lantern, with its horizontal arches or compression chords held together by tension webs of the skin.

It is the claim of the Fuller people that the air conditioning system (to be located in the "central facilities column") will be considerably smaller than that called for in a comparably sized house of conventional design.

There are some claims to the effect that the use of aluminum roof and walls reflects the heat, but the real savings, according to the claims made, are the "aerodynamic advantages" of the Fuller house with respect to heat losses.

'AERODYNAMIC' AIR HANDLING

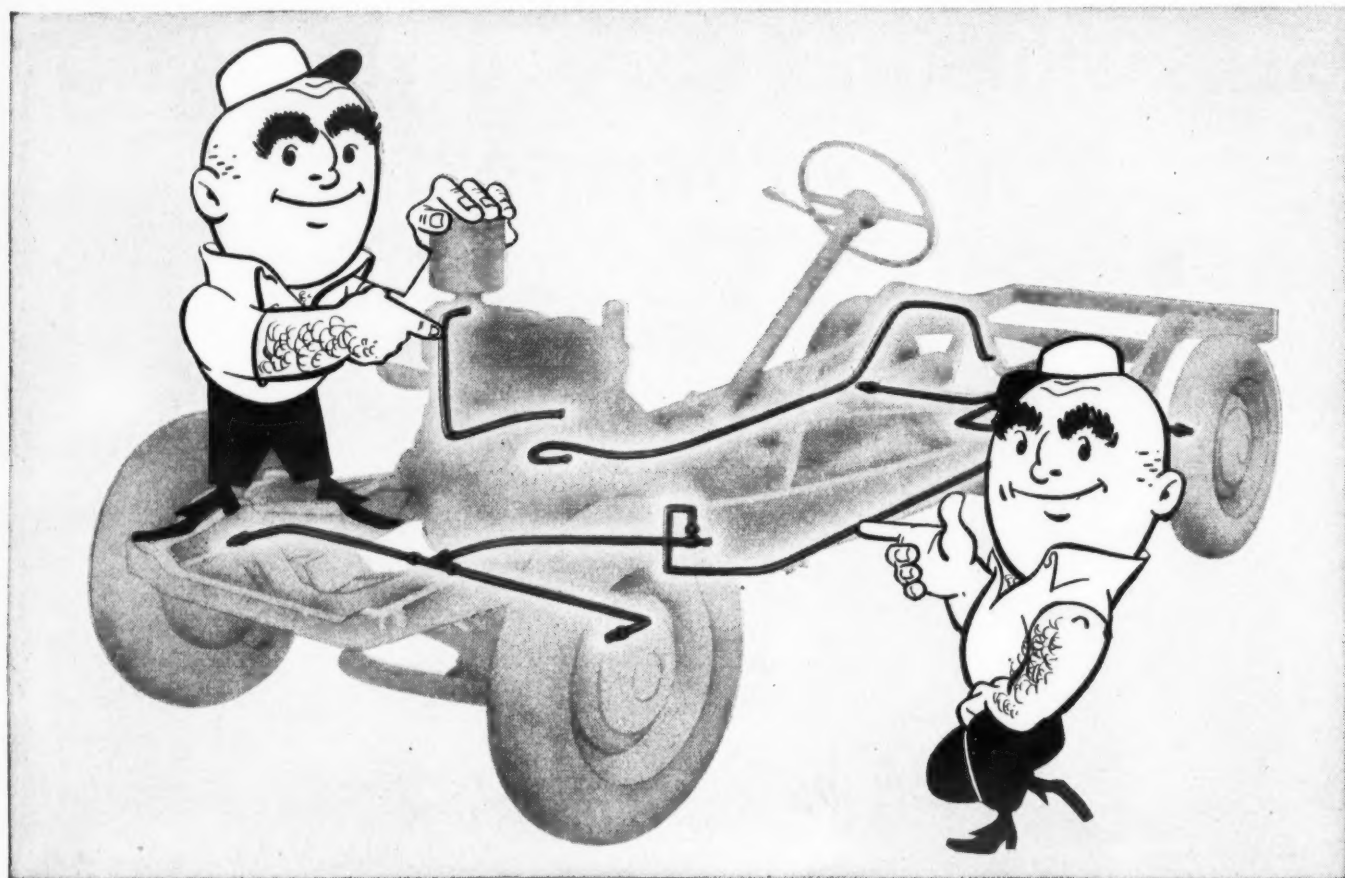
This is the company's explanation of the "aerodynamic advantages":

"It is a familiar principle that any object which offers wind resistance—whether it is a plane moving through the air or a house standing still in a storm—creates a cone-shaped low pressure area in its wake.

"Research has shown that in the case of a conventional square or rectangular house the low pressure cone is very large and has the effect of drawing warm or high pressure air from the house to fill the low pressure area. The warm air escapes through inadequately sealed windows and through other unsealed holes or cracks in the house. Windows in the Fuller house are sealed and doors are air-tight.

"Fuller sought a way to get the effect of streamlining and thus to

(Concluded on next page, Col. 1)



WANTED—TUBING USERS FROM MISSOURI

WE like to work with tubing users from Missouri—who say "show me." Because, given a chance to work with you and show you, our design engineers can readily demonstrate why it's to your advantage to use Bundyweld—the tubing that's superior, different.

In the automotive industry, for example, Bundyweld Tubing has so well demonstrated its superiority that it now serves in more than 40 places in automobiles. Here are a few of the many reasons why Bundyweld Tubing is overwhelmingly preferred by automotive manufacturers . . . for use wherever fuels, lubricants, hydraulic pressures, or vacuums must be conveyed:

- great resistance to vibration fatigue.
- high bursting point in pressure applications.
- great strength.
- low cost.
- easy fabrication.

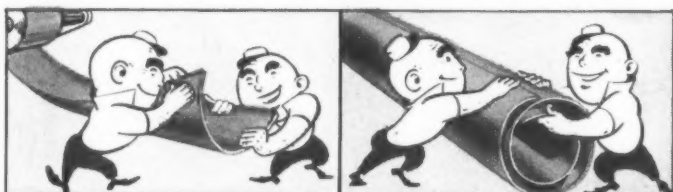
How about your products? Chances are Bundyweld Tubing can serve you better and cut costs—no matter how you may employ tubing. May we show you? Write today. Bundy Tubing Company, Detroit 13, Michigan.



BUNDY TUBING DISTRIBUTORS AND REPRESENTATIVES:

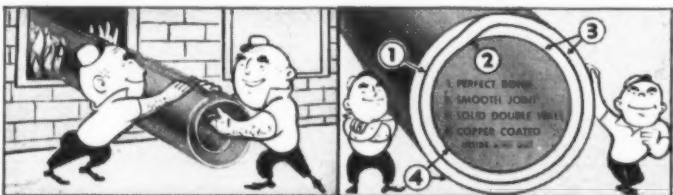
Pacific Metals Co., Ltd. 3100 19th St. San Francisco 10, Calif.	Standard Tube Sales Corp. 1 Admiral Ave. Maspeth, N.Y.C., N.Y.	Lapham-Hickey Co. 3333 W. 47th Place Chicago 32, Illinois	Rutan & Co. 112 S. 16th St. Phila. 2, Pa.	Eagle Metals Co. 3628 E. Marginal Way Seattle 4, Wash.	Alloy Metal Sales Ltd. 861 Bay St. Toronto 5, Canada
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1 Bundyweld Tubing is made by a process entirely different from that used in making other tubing. A single strip of copper-coated S.A.E. 1010 steel is continuously rolled twice laterally . . .

2 . . . into tubular form. Walls of uniform thickness and concentricity are assured by the use of close tolerance cold rolled strip. This double rolled strip passes through a furnace where the . . .

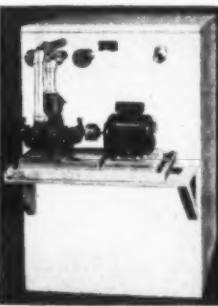


3 . . . copper coating fuses and alloys with the double steel walls. After brazing and cooling, it becomes a solid double wall steel tube, copper brazed throughout 360° of wall contact . . .

4 . . . copper coated inside and out, free from scale, closely held to dimensions. Hard or annealed in standard sizes up to 3/4" O.D. Special sizes cold drawn. Also in Monel, nickel and nickel alloys.



WATER COOLERS AND FILTERS



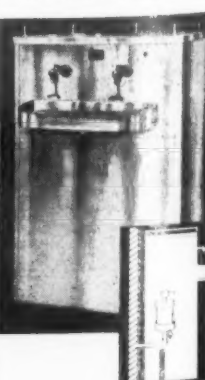
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STAINLESS STEEL CAFETERIA COOLER



THE SMALL FILTER... SPARKLING WATER

Conditioned Air Blown From the 'Mast'

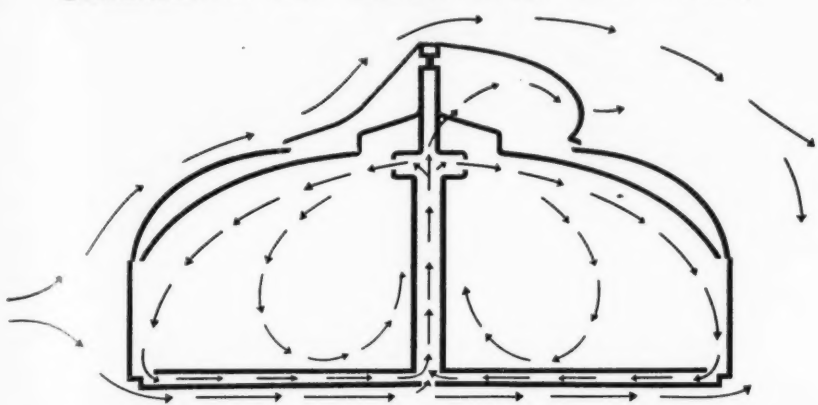


Diagram showing flow of air in the Fuller dwelling. Ventilator on roof uses "natural" low pressure on the down-wind side of the house to draw air through the diffusing system. Heating unit is two-thirds of the way up the mast, it distributes air through each room where registers at the outer edge of the floor draw off exhaust air through ducts back to the mast and out the ventilator. Main intake is beneath the mast at the center of the house.

Air Handling System In the Fuller House

(Concluded from preceding page)

minimize drag and heat losses. Research into wind motion pointed the way to a solution. He found that the resultant of focus of wind stress near the earth's surface is in an upward direction in the lee of a house. He noted that trees are also aerodynamic structures and tend to avoid destruction by the wind by rounding their lower frontal branches to the approaching air and by coning their upper branches to point in the direction of the leeward and upward draft—thus reducing drag to a vital degree.

"Wind studies led to the design of a large ventilator (18 feet in diameter) which rotates on the top of the house in such a manner (heading always into the wind) as to focus the low pressure area at a point about 45 degrees leeward and upward from the center of the house.

AIR IN HOUSE CHANGED EVERY SIX MINUTES

"The ventilator serves another purpose: the focused low pressure in the lee of the ventilator draws air from the house—changing the air inside every six minutes. Fresh air enters the house through a duct system in the roof and beneath the house.

"Flow of warm and cold air inside the house is fountain-like. Air rises to the top of the central column, flows outwardly and down the domed ceiling to the circular walls, then concentrically across the floor to the center where it rises again to the top of the column."

Company officials emphasize that the house should not be termed "prefabricated," since neither panels nor subassemblies will be constructed at the plant. It will be assembled entirely at the site from mass-produced parts. All of the parts, with the exception of the kitchen equipment, can be packed in a cylindrical steel container, 16 feet long and 4½ feet in diameter.

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Condensing Unit Prices Set For Kelvinator

DETROIT—Four models of condensing units manufactured by the Nash-Kelvinator Corp. here were ceiling-priced at the following levels on sales to distributors, dealers, and consumers in Order 391, MPR 591:

Model	On Sales to—		
	Distributors	Dealers	Consumers
No. S-20 ½ hp. condensing unit	\$47.85	\$56.27	\$127.60
No. S-25 ¾ hp. condensing unit	53.10	62.45	141.60
No. S-33 1 hp. condensing unit	63.82	75.04	170.17
No. S-50 1½ hp. condensing unit	75.74	89.07	201.97

The above prices are subject to the usual discounts and allowances and the extension of services comparable to those extended to the same class of purchaser on Oct. 1, 1941, OPA said.

Delaware Co. 18-cu. ft. Model Priced at \$540

PHILADELPHIA—Maximum retail price of the Delaware Refrigerator Co.'s 18 cu. ft. frozen food cabinet equipped with a ½ hp. condensing unit was set at \$540, according to OPA Order 372, MPR 591. On sales to distributors and dealers, OPA ceilings were \$270 and \$324, respectively.

These prices are subject to discounts and allowances and the extension of services comparable to those extended to purchasers of the same class on similar sales on Oct. 1, 1941, OPA added.

Dealers, Contractors Not Liable To Fair Labor Standards Act

NEW YORK CITY—If the majority of a refrigeration firm's business is confined to the geographical limits of its home state, such a firm does not come under the jurisdiction of the Fair Labor Standards Act. That is the opinion submitted recently by Schneider & Edelstein, counsel for the Refrigeration & Air Conditioning Guild, Inc.

This Act, which governs wages and hours of workers, is concerned primarily with firms engaged in interstate activity, the opinion stated. If a company falls within the terms of the law, an employee must be paid overtime rates for all time worked in excess of 40 hours per week. But if the Act does not apply to a firm, hours and wages are not so controlled.

Following is the text of counsel opinion, submitted through Nathan Edelstein:

"The Fair Labor Standards Act was enacted and became effective in October, 1938, and is cited as 29 U.S.C.A. 202 et seq. Section 206 and 207 of 29 U.S.C.A. sets forth the general provisions governing hours and wages. Section 213 specifically provides that the wage and hour provision of the Act shall not apply to 'any employee engaged in any retail or service establishment (when the greater part of its selling or servicing is in intrastate commerce)'. It would therefore appear that if a good part of the refrigeration service man's business is in intrastate (within the state) business, the law has no application to his business.

"In a recent case construing this section of the law, reported as Walling vs. Roland Electric Co. (D.C.-Md.) in 54 Federal Supplement 733, the Court held

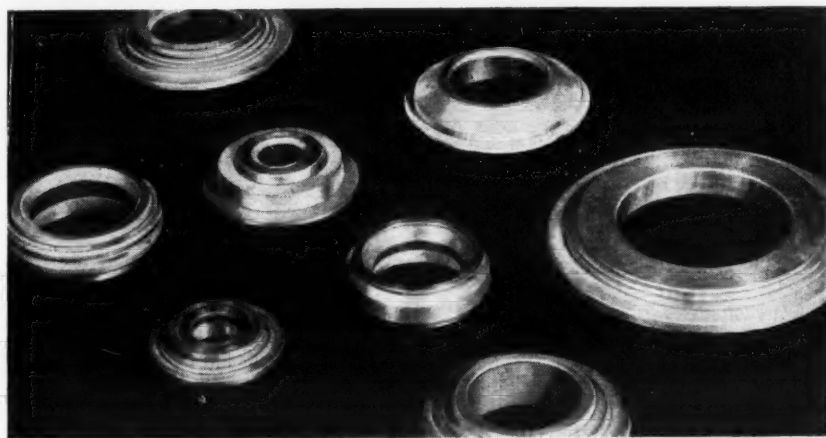
'a corporation engaged in the business of buying and selling new and used electrical motors of various types, of repairing, reconditioning and rebuilding used motors and of installing and repairing private, commercial and industrial wiring systems, all intrastate commerce, was exempt from this Act as a retail or service establishment.'

"This decision covers the refrigeration business exactly. It is obvious therefore from the wording of the statute and the decision quoted above that the important and determining point for each refrigeration company, would be whether or not the greater part of its business of selling or servicing is done within the State. It must always be remembered that the Law will not apply if an occasional job is done outside the State.

"In conclusion, there appears to be no question that most refrigeration companies in New York City engaged in selling and servicing refrigeration equipment do not fall under the act."

SABECO BRONZE SEALS

THE MOST SUCCESSFUL SEALS FOR REFRIGERATION AND AIR CONDITIONING EQUIPMENT



Because it will not corrode, seize, score, or pound out even when lubrication fails, SABECO bronze is used by 85% of the refrigerator manufacturers for seals in rotary and reciprocating compressors. It is likewise demonstrating its superiority in the field of air conditioning equipment, where leading manufacturers have recognized that SABECO provides that extra margin of safety and dependability found in no other metal. Made from copper, tin, and lead only, with a maximum of 2/10 of 1% total impurities, SABECO bronze may be the means of prolonging the life and increasing the dependability of your products or equipment. For complete particulars write to Saginaw Bearing Co., 861 S. Water St., Saginaw, Michigan. Cable address "Sabeco".

sabeco bronze

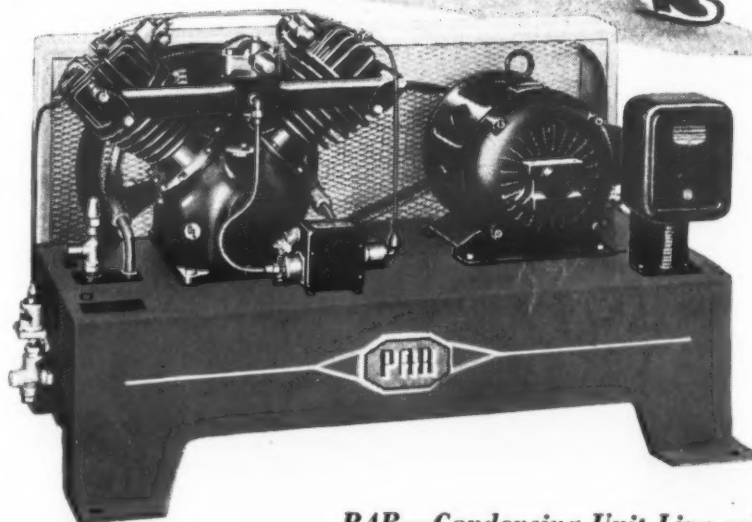
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$$\begin{matrix} 1+1=2 \\ 1+2=3 \end{matrix}$$

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PAR BY Lynch



PAR—Condensing Unit Line sold exclusively through Franchised Refrigeration Supply Jobbers!

Just add up the many outstanding features of Par Refrigeration Equipment and your answer is "Buy Par". There are models and sizes to fit all applications from 1/6 to 5 H.P. So see your Par Jobber today or write to us for Par Refrigeration catalog R-97.

... By Comparison — You'll Buy PAR

Lynch Manufacturing Corporation

TOLEDO 1, OHIO, U.S.A.

Smith & Durham Named to Production & Sales Posts With Quillen Bros. Refrigerator Co.



RICHARD E. SMITH



WILLIAM H. DURHAM

INDIANAPOLIS — Richard E. Smith, formerly superintendent of the Curtiss-Wright Corp. machine division, and William H. (Bill) Durham, recently discharged from the Army with the rank of colonel, have been appointed production manager and regional sales director for the west south central territory, respectively, at Quillen Bros. Refrigerator Co. here.

In the past, Mr. Smith has held such positions as general foreman at the Indianapolis plant of Curtiss-

Wright, and gear specialist with the General Motors motor and axle division. In his present capacity he will supervise all production at the Quillen plant, including the manufacture of the Quillen home freezers and self-serve display cases for delicatessen, frozen foods, and meats, announces Stanley C. Bell, manager.

Prior to his entry into the Army in 1942, Mr. Durham was associated with the automobile distribution business in Texas. He will headquarter at 124 E. Jefferson St. here.

Refrigeration Production Resumed by Gibson

GREENVILLE, Mich.—The Gibson Refrigerator Co. was to resume production of electric refrigerators on April 2, according to an announcement made here.

Production was said to have been shut down since Feb. 15 as a result of the steel and electrical workers' strikes.

Ice Cuber Ceilings Given To Aircraft Equipment Co.

SOUTH NORWALK, Conn. — A retail ceiling price of \$425 has been set by OPA for a refrigerator ice cuber manufactured by General Aircraft Equipment, Inc. here.

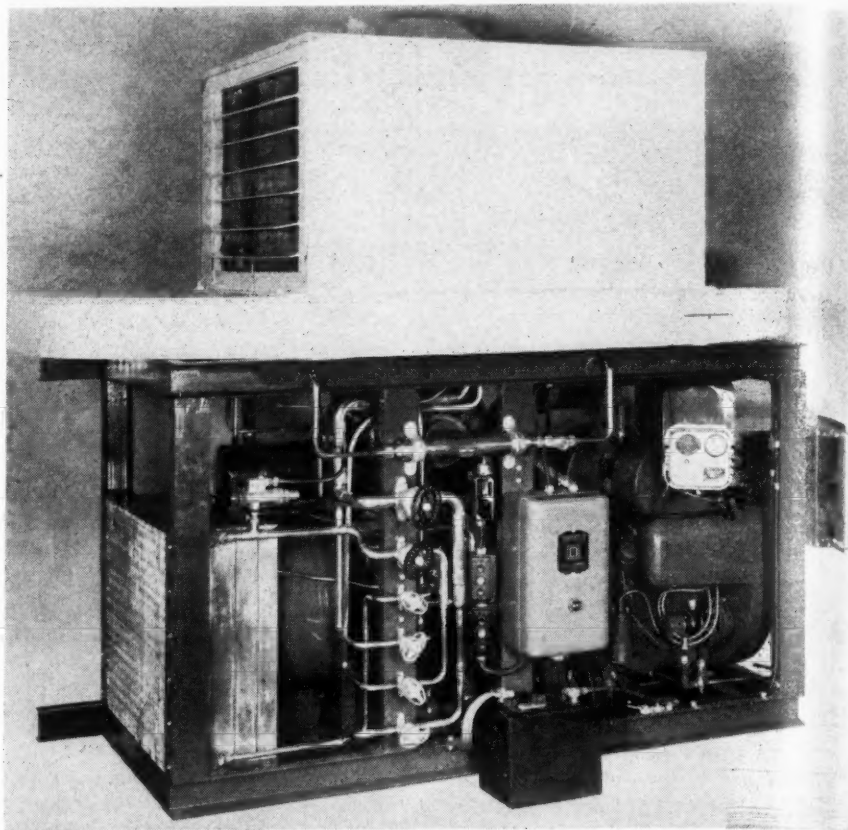
Order 366, MPR 591, authorizes the following other ceilings for the model, No. 40C: exclusive sales rights, \$200.81; to distributors, \$223.12; to dealers, \$283.33.

C.E. Jones Named Assistant Agaloy Tubing Sales Head

SPRINGFIELD, Ohio — Carl E. Jones has been appointed assistant sales manager of the Agaloy Tubing Co., with headquarters at the company's mill in Springfield, Ohio, according to a recent announcement.

Mr. Jones was formerly a naval lieutenant with the Aircraft Scheduling Unit and stationed at Wright Field.

An Answer to a Major Problem in Frozen Foods?



Mounted in the front end of a trailer this reverse cycle unit produced by Advance Mfg. Co. is said to hold a 20,000 lb. load of frozen foods at -10° F. Note the six hand valves used to shift the unit from cooling to heating cycles. First showing was at the recent Frozen Foods Institute exhibit.

Reverse-Cycle Truck Refrigeration Unit Permits Hauling Frozen Foods at -10°

By C. Dale Mericle

DETROIT—Designed to hold 20,000 lbs. of frozen food in a trailer at -10° F., a new model of its reverse cycle truck cooling-heating unit intended specifically for frozen foods haulage is being introduced by Advance Mfg. Co. here, announces Henry Kirkpatrick, designer of the unit.

In addition to providing lower temperatures than the standard Trail-Aire unit produced for Fruehauf Trailer Co., the new model also incorporates several improvements, according to Mr. Kirkpatrick.

The refrigeration unit is powered by a 4-cylinder Wisconsin v-type gas engine which develops 17 hp. at 1,800 hp. Refrigeration and fan load on the engine is actually only 7½ hp., the engine power output being limited by a flyball governor on the throttle.

This model also incorporates a 7½ hp., three phase 220-440 volt Westinghouse motor which can be plugged in if desired to operate the unit overnight when the trailer is stationed at a warehouse.

Both the gas engine and the electric motor are connected by v-belts to a jack shaft driving the compressor and the condenser blower. An over-running clutch direct-connected to the engine crankshaft permits the gas engine to remain stopped when the electric drive is in use. When the gas engine is operated the electric motor idles.

Compressor in the unit is a two-cylinder General Electric Co. model designed to deliver 18,000 B.t.u. per hour at -25° F. evaporator temperature.

A feature of the new Trail-Aire frozen food unit is a heat exchanger designed by Advance Mfg. Co. The company claims it is more efficient than any used to date.

Mounted in the suction line just as it leaves the coil, the exchanger core consists of a section of Wolverine "trufin" tubing fitted with a spiral metal strip to provide a rifling effect to the refrigerant gas. Liquid refrigerant enters one end of the interchanger and is spiraled around the outside of the "trufin" tubing, while the suction gas enters the tubing at

the opposite end.

The spiraling of both liquid and suction lines gives longer contact within a short space, and the scrubbing action of the refrigerant vapor around the inside of the tube increases heat transfer, according to Mr. Kirkpatrick.

Internal rifling is easily made by inserting a straight piece of strip copper in the "trufin" tube, twisting it, and then tacking the ends, it is explained.

A Temprite oil separator has been included in the unit, and the company is considering installing oil separators on its standard models, Mr. Kirkpatrick said.

"Due to low back pressure at low temperatures, most compressors will slug oil," he explained. "And oil at low temperature should be kept out of the coil. With our three-circuit coil operating at -25° F., oil might become logged in one of the circuits."

This unit, as is the standard trailer model, is designed for reverse cycle heating. Although it is unlikely that the heating cycle would be used while hauling frozen foods, the trucks might be used for other than frozen foods, particularly on return trips, points out the company. Reverse cycle heating is used, however, to defrost the unit.

Changeover of the unit from the cooling to the heating cycle, or vice-versa, is done manually. The unit is first switched off. Then three hand valves in the refrigerant circuit are shut and three others opened. The unit is then switched back on, selecting the cooling position of the switch or the heating position.

A double-pole double-throw type switch is employed to change from gas engine to electric drive. The electric motor is cut in to prevent the 220 volt circuit's feeding into the 6-volt gas engine circuit and thus burning it up.

Standard trailer designed by Fruehauf for frozen food hauling is of stainless steel construction 28 ft. long insulated on all sides with 6½ in. of Fiberglas.

Its capacity is at least 10 tons of frozen food.



THIS SPRING FOR YOUR REFRIGERATION PARTS AND SUPPLIES



*Competitively Priced
Conveniently Warehoused*

April showers bring May flowers . . . but even more important, they mark the time for the refrigeration service man to get ready for his busy season. This year the alert refrigeration service organization will be the one that stocks up on parts early. Supplies are bound to be limited while service calls increase.

That's why more and more service organizations and independent service men alike are turning to Kelvinator Parts Depots now for their hot weather refrigeration requirements. Established at strategic points throughout the country, Kelvinator's 50 points of distribution make refrigeration parts and supplies, including condensing units, quickly available in every locality. NASH-KELVINATOR CORPORATION, Detroit.

BUY KELVINATOR FOR ALL YOUR REFRIGERATION REQUIREMENTS



Kelvinator

CONDENSING UNITS

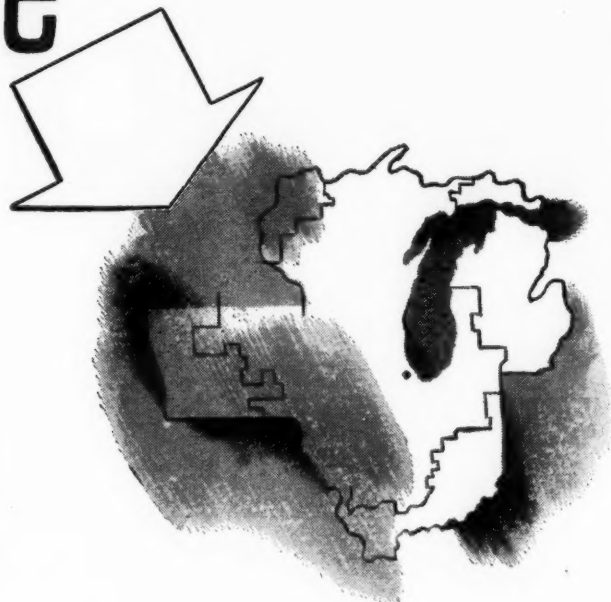


REFRIGERATION PARTS AND SUPPLIES

FOR—"THE LONG PULL"
WE WANT—ON DISTRIBUTOR BASIS
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... You can get double duty out of your first year's selling by concentrating on the rich, compact market that is located right at the heart of America—the great Chicago market. You can get started quickly and get set for the days ahead in this strategic market with a single powerful advertising medium—the Chicago Tribune.

One out of every three families in 756 cities and towns of 1,000 or more population in this area reads the Tribune on weekdays. On Sundays, it is practically every other family. The Tribune is bought, read and bought from as is no other medium here.

QUICK VOLUME

... In this easily accessible market, defined by consumer habits and merchandising practice, there is enough business to take the entire output of many manufacturers. Here you can get immediate volume and build solidly for a continuing, profitable operation.

Here is a market with a huge pent-up demand for automobiles, washing machines, refrigerators, radios and "big unit" products generally ... a market famous for its tremendous volume purchases ... a market that has repeatedly broken factory and branch sales records.

SOLID FUTURE

... No matter whether your production will be large or small, the Chicago market will reward your attention as the place to get the consumer buying you want. It is fortified by diversified income and billions in savings.

This \$4,496,734,000 market offers quick sales now ... and solid dealer and consumer preference when the first easy selling conditions pass and the competition gets tough. Now is the time to get going.

CHICAGO TRIBUNE

The World's Greatest Newspaper

In this market only the Tribune gives you a choice of monochrome, color, comic, or black and white printing at milline rates which are among the lowest in America.

February average net paid total circulation:
Daily, over 1,025,000; Sunday, over 1,450,000.

Now available for your study and use is a specific Tribune sales program based on the findings of an auto and household appliance investigation among consumers and dealers. To get these pertinent facts, address C. S. Benham, Manager, National Advertising, Chicago Tribune, Tribune Tower, Chicago 11, Illinois.

Portland, Ore. Philco Distributor Moves Into New Building

PORTLAND, Ore.—From its temporary headquarters at 406 Grand Ave., the firm of Appliance Wholesalers, distributor of Philco radios and refrigerators in Oregon and southwest Washington for 16 years, has moved into its new \$100,000 building at 600 N.W. 14th Ave., announces J. C. Severtson, president and general manager.

Recently discharged from the Navy, a lieutenant-commander after 40 months' service, Mr. Severtson also announced that Charles Douglas, formerly with Philco as a member of an airborne coordinating group during the war, will head the accessory division. In this capacity, he will perfect the dealer service organization.

R. G. Masters is general sales manager of the firm, and P. J. Heinz is manager of the appliance division.

The new Appliance Wholesalers building, covering a ground floor area of 100 x 200 ft., provides a total of 24,000 sq. ft. of floor space for offices and display of appliances and accessories. Provision has been made for air conditioning in the executive offices which are located on the second floor.

In addition to the Philco line, the firm handles Lindemann & Hoverson ranges and water heaters, Horton washers and ironers, Allen oil circulators, Filter Queen cleaners, and Knapp-Monarch small appliances, Mr. Severtson, said.

Appliance Development Firm Gets SEC Hearing

PHILADELPHIA — The Appliance Development Corp. of New York City has been given a hearing before the Securities and Exchange Commission for the purpose of ruling on its status as a corporation.

Contention of the company is that it is engaged primarily in the manufacture of home appliances as a business rather than in the investing, reinvesting, owning, holding, or trading of securities. The firm is seeking such a declaration or an exemption from the provisions of the Investment Company Act, according to the commission.

3 Area Sales Chiefs Appointed by G-E

BRIDGEPORT, Conn. — Appointment of three area managers of appliance sales for the General Electric Co. has been announced by C. R. Pritchard, general sales manager of the appliance and merchandise department.

Glen H. Harker, former heating device and clock specialist in San Francisco, has been named appliance sales manager in Los Angeles.

Fred K. Hagar, who is taking over a similar job in Salt Lake City, was formerly with the General Electric Supply Corp. in Omaha.

Fay W. Wheeler, now appliance sales manager in Nashville, Tenn., is a former heating device and clock specialist in the Atlanta, Ga., Tampa, Fla., and Dallas, Tex., offices of the company.

Stoker Demand Is High; Shortages Hit Output

CHICAGO — Business outlook for 1946 from the stoker manufacturers' vantage point is only mildly optimistic in the light of possible shortages of important component parts, such as electric motors, steel and gray iron castings, and skilled labor, according to Marc G. Bluth, executive secretary of the Stoker Manufacturers Association.

In view of the recent steel shutdown, continued Mr. Bluth, "stoker manufacturers will be unable to meet production and delivery schedules during the coming year. Producers of fractional horsepower motors just don't have enough capacity to take care of the demand for their products which are used in the manufacture of stokers for residential and small commercial heating purposes," he said.

Labor supply in the foundries, which supply stoker firms with both steel and gray iron casings, will have to show definite improvement before the sought-after high production schedules will be obtained, and the backlog of unfilled stoker orders taken care of by the manufacturers, Mr. Bluth concluded.

Sample Sets Up Store In El Dorado, Ark.

EL DORADO, Ark.—The J. F. Sample Electric Co., handling major electrical appliances, has been opened for business in a new building on South Washington St. here.

Participation In Strike Could Cut Off Employee From Ranney Profit-Sharing

GREENVILLE, Mich.—A proposed profit sharing plan that will divide net profits almost equally between employees and stockholders has been announced for the Ranney Refrigerator Co. by L. W. Ranney, president of the company.

These dividends will amount to almost 25% of the gross profit for each of the two groups, after initial subtraction of taxes, reinvestment funds and the like. The plan's provisions are the result of study of similar plans in operation everywhere, and represent the best features of these, the company believes.

Any employee's union or non-union status will make no difference in the profit bonus he will receive, according to Clinton Millman, the company's general manager, who released details of the plan.

On the other hand, participation in any strike, whatever its form or name, and whether authorized or unauthorized by the union, will at the discretion of the company result in the employee's losing his profit share, Mr. Millman explained. This share will remain in the general fund for division among the remaining employees.

The amount of each employee's share will be figured, not according to his base rate of pay, but according to his straight hourly rate and the

number of hours he has worked during the preceding 12 months.

For salaried workers, the profit bonus will be based upon their monthly salaries and the months or portions of months worked during the preceding year, Mr. Millman said. Piece work earnings, overtime premiums, and bonuses such as vacation pay thus will not count in the reckoning.

Certified public accountants will figure the profit share for each employee, and their figures, like OPA ceiling prices you charged in April, 1942, will be open to the employee's inspection.

If the employees accept the plan, it must then be approved by the United States Treasury. If passed by both, it will become effective immediately, and be retroactive to Aug. 1, 1945, Mr. Millman revealed.

Meanwhile, after months of only partial operations because of reconversion and other activities, the beginnings of full production will get under way before the end of this month, he said.

Orders for household refrigerators totaling 6 million dollars will be scheduled for delivery during the next 12 months. The plant has tools and new equipment worth \$350,000, he stated, and another \$1 million will go into actual production costs.

Distributors Association, Inc. Will Wholesale Brand Lines of Freezers and Other Items

KANSAS CITY, Mo.—Samples of the 13 major lines of electrical appliances, products, and farm equipment contracted to date were shown at the first annual meeting of Distributors Association, Inc., held at the President hotel here, recently.

Models displayed included Sovereign products such as farm freezers, milk coolers, vacuum cleaners, washing machines, pump jacks, 32-volt arc welders; Trindl AC arc welders; Leland motors; Jud Whitehead electric, gas, and oil water heaters; Parris-Dunn wind generators; Lister-Blackstone diesel generator sets; Quincy air compressors; and Empire table appliances. Several of the products were presented in convention manner by factory representatives.

Distributors Association, Inc., composed of 20 distributors, all of whom are exclusive Delco-Light jobbers, operates throughout 16 midwestern states. By forming an association to pool their purchasing power, these distributors, together with their several hundred dealers, are in a position to supply and service REA,

utility power, and light for farmers.

The association has adopted the name "Sovereign" as its private brand, and the name will be used on all lines where dual distribution with factories' regular customers might occur.

Distributors Purchasing Co., 528 Liberty building, Des Moines, Iowa, is purchasing agent, with M. W. McKenzie as president and general manager. The company will also handle association private brand advertising, and will have field men contacting the large distributor group for the purpose of supplying merchandising assistance and advice.

The entire group of the association's directors was re-elected for the coming year. They are: president, Lee T. Dewhirst of General Products, Inc., Wichita, Kan.; vice president, C. E. Wilson of Electric Equipment Co., San Antonio, Tex.; secretary-treasurer, Ken E. Snodgrass of Snodgrass & Smith, Denver; directors, Fred A. Ryser of Farm Electric Supply, Des Moines, Iowa; and Dewey E. Goodman of Goodman Farm Electric, Grand Forks, N. D.

New Service To List and Describe Expiring Patents

NEW YORK CITY—"Public Domain" is a new service consisting of a weekly publication, each issue of which will be a 250-page reference book containing over 1,000 patents due to expire four weeks after date of issue and which will then be in the public domain; or, in other words, open to exploitation by whoever cares to use them.

Each patent shown will include a

reproduction of a draftsman's drawing together with a digest of typical claims and salient features.

The first, regular issue of "Public Domain" will appear in May.

Charter subscriptions are offered for one year at \$45; for six months at \$25; and for 10 weeks at \$10. Published by the Scientific Development Corp., 614 West 49th St., New York 19, N. Y.



STOKOL is the RED HOT PROFIT LINE in the Stoker Field

Practically everyone who heats with coal is a Stokol Stoker prospect. The wide range of Stokol models and capacities will fill the bill whether the prospect owns a five-room cottage or a 15-floor apartment house. That's why we can say that Stokol is the red hot profit line in the stoker field!

From the dealer's point of view, Stokol offers the finest line of stokers it has ever manufactured—a reputation for the best that is backed by over 140,000

Stokol owners—and a dealer's agreement that is fair and packed with profit possibilities. A Stokol dealer need not be satisfied with a small slice of the market—he can go after the entire field with a complete line of domestic, commercial and industrial stokers—bin-feed or hopper models which burn all types of coal.

Some profitable territory is still open. Investigate the big Stokol profit opportunity by mailing the coupon today.



STOKOL STOKOL STOKOL STOKOL CO., INC.
1145 E. 22ND ST., INDIANAPOLIS 7, IND.
Gentlemen: Send details of Stokol profit possibilities for me as a dealer.

NAME _____
ADDRESS _____
CITY _____ STATE _____

ACRN

Tear out and mail this coupon today! ↑

IF THE PART YOU WANT
can be had...you can get it at..

REFRIGERATION PARTS HEADQUARTERS

THE HARRY ALTER CO.
1728 S. Michigan Ave. Chicago, 16, Ill. Two Big Warehouses to Serve You 134 Lafayette St. New York, 13, N.Y.

Assistant Sales Chief



NORWOOD D. CRAIGHEAD

Who is now assistant sales manager of Bendix Home Appliances, Inc. He had formerly been merchandising manager and director of sales training.

Pricing by Westinghouse Distributors Outlined

MANSFIELD, Ohio—Three methods by which the distributor may determine his maximum price on sales to dealers of Model AS-7-46 refrigerator manufactured by Westinghouse Electric Corp. here are outlined in Order 13, MPR 598, as follows:

1. The distributor's ceiling price should be such that it yields him the same percentage of the total dollar margin between the manufacturer's price to him and the dealer's price for resales to consumers as he received during the period of Oct. 1 to 15, 1941, in connection with the sale of the most comparable model to the same class of purchasing dealer.

2. If, for some reason, the distributor finds the above method unsuited to his case, he may adopt the ceiling price established under this order for the sale by his "closest seller of the same class."

"Closest seller of the same class" is defined by OPA as another distributor who is located nearest to the distributor and who has a ceiling price for sales of the identical model of refrigerator to the same class of purchaser.)

3. If neither of the above methods give the distributor his ceiling price, he may mark up the manufacturer's delivered price to him by 18.44% and use that as his maximum price, OPA said.

5 'Good House' Stores In Philadelphia Feature Model Kitchens, Laundry

PHILADELPHIA—Model kitchens and laundries, television booths, and phonograph demonstration rooms—amplified by such sales "boosters" as large show windows giving window-display effect to the entire store, and brilliant lighting—are receiving priority attention in the planning of five Good House outlets for home appliances here.

These and other features are explained in detail, accompanied by pictures of the store sites, in a booklet published by Good House expressly to inform manufacturers of dealer activities.

Two of the five planned Good House stores are open for business, a third will open about April 1, a fourth is undergoing complete modernization, and a fifth is being built on a downtown lot, according to the booklet.

BIG PARKING LOT

Located at 17 W. Lancaster Ave. in Ardmore, Pa., is a Good House appliance showroom and merchandising center with 3,000 sq. ft. of sales area on the main floor, plus 2,800 sq. ft. for additional display, storage, and service work in the basement. There is a driveway for the convenience of patrons, it is reported, and 6,000 sq. ft. of parking space.

The interior has been newly remodeled, featuring display islands for small appliances and extra room for major items. A model kitchen, model home laundry, record booths, and special phonograph displays are given the center of the stage.

TELEVISION ROOM, TOO

The Good House outlet at 5325 Germantown Ave. in Philadelphia, features, in addition to a model kitchen and home laundry, a television booth. Appliance items retailed here include room-size air conditioners, home freezers, refrigerators, electric ranges, washers, hot water heaters, radios, and kitchen cabinets, it is reported. Temporary general headquarters of the organization are maintained at this store.

Leased by Good House, the opening date for the store on N. Fifth St. is set for about April 1. Floor space totals 4,118 sq. ft., the main floor measuring 29 x 81 ft. and the basement, 29 x 61. Complete remodeling now in progress includes new brilliantly lighted display windows, the booklet says.

Undergoing complete remodeling, the store at 4417 Frankford Ave. has three floors, each containing 3,217 sq. ft. of floor space. The main floor will be used for an appliance showroom, the second floor for offices and merchandise displays, and the basement for service and storage, it is reported. Space is being provided for parking and a loading platform in the rear. The new store design, it is said, will embody over-size windows.

NEON-FRAMED WINDOWS

A modern building designed and planned exclusively for the appliance business is now being built at 122 W. Chelton Ave., states Good House. Having two floors, the total floor space will be 5,000 sq. ft. Big windows with new lighting and glass front and sides are being incorporated in the construction.

When all five Good House stores are completely remodeled, each will be equipped with neon-framed windows, modernized store fronts, 11 ft. electric signs, and specially planned interiors.

Good House handles Hotpoint electric ranges, refrigerators, washers, home freezers, and kitchen cabinets; Kelvinator refrigerators; Philco refrigerators, air conditioners, home freezers, and radios; Bendix automatic washers; Deepfreeze home freezers; General Electric small appliances and radios; Speedqueen washers; Thor washers; Magic Chef ranges; and many other lines.

Officers of Good House Stores, Inc., are: E. V. Newkirk, president; J. Russell Graves, executive vice president; F. L. Berger, stores' manager; Robert E. L. Johnson, merchandise counselor; Franklin H. Bates, secretary-treasurer; J. Harlow Vrooman, comptroller; William Drake, sales; and William Miller, supervisor of service and repair.

Ceiling Price Set On Firestone Range

AKRON, Ohio—On sales of its Model 5-C-1 electric range to consumers, the Firestone Tire & Rubber Co. here received the following ceiling prices via OPA Order 262, MPR 64: In Zone 1, \$169.50 each; and in Zone 2, \$178.50 each.

With these prices go the usual inclusions, such as Federal excise tax, delivery, a one year warranty, and installation where mere connection to electrical facilities already provided is all that is needed.

If a range cord set, customarily called a "pigtail," is required and furnished by the dealer, OPA authorizes him to add \$3.50 to the applicable retail ceiling price.

Combination Range Models Are Priced

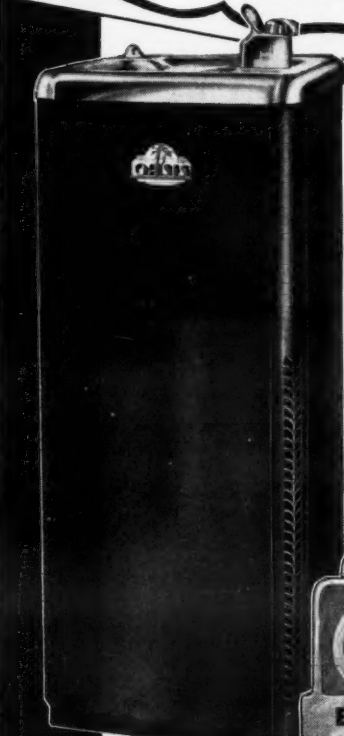
PORTLAND, Me.—Two models of gas combination ranges manufactured by Portland Stove Foundry Co. here have been given retail ceiling prices on a zone basis by OPA in Order 252 to MPR 64.

Included in the prices is the Federal excise tax but no state or local taxes. If the dealer doesn't provide installation, he must deduct \$9 from the ceiling.

Model	Zone 1	Zone 2	Zone 3	Zone 4
234 Atlantic combination	\$196.95	\$203.75	\$212.25	\$220.25
838 Atlantic combination	213.25	220.95	230.50	239.50

To the above prices the dealer may add charges for ranges equipped with additional equipment such as a canopy shelf or buffet assembly.

A MASTERPIECE IN WATER COOLERS

OASIS COOLER DIVISION
The EBCO Manufacturing Co.401 W. Town Street
Columbus 8, Ohio

Striking beauty matches brilliant performance in the new OASIS Electric Water Cooler. For beauty, note the deep ebony tones of the neatly recessed base... the rich walnut-bronze finish of the handsome, corner-louvered cabinet... the silvery luster of the new stainless steel top. And for pleasant, sanitary, dependable drinking ease, you'll like the new feather-touch control on the splash-proof "angle-stream" EBCO bubbler... the quiet-running mechanism and super-capacity condenser. The new OASIS tops EBCO's 20 years of Electric Water Cooler leadership. Write for details!



this speck of sand is going to get in the public eye



It started as plain, ordinary sand. It has ended up as Santocel,* one of the most amazingly versatile products ever to come out of Monsanto research.

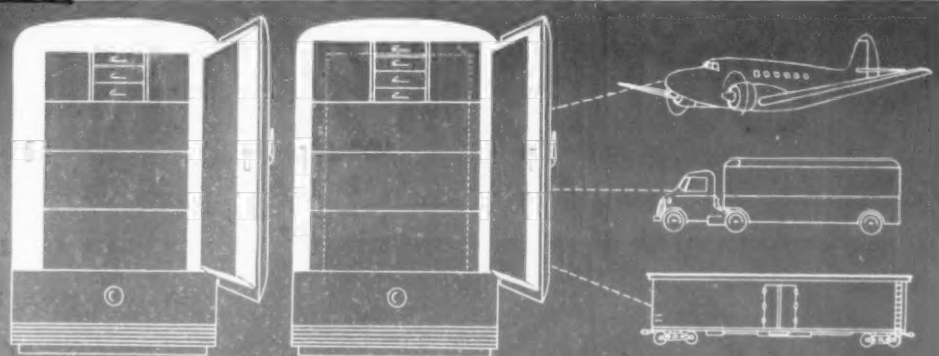
Already, this unique, chemically-converted sand is influencing product design and manufacture in nineteen different industries. Here are just a few of the many things Santocel can do:

It's the best insulating material ever made. Santocel actually makes it possible to cut insulation bulk in half... which means refrigerators with up to 40% more storage capacity than present models, yet occupying no more total space.

It does wonders in speeding the drying of printing inks... in adding a rich, satiny smoothness to the finishes left by varnishes and lacquers... in bringing new improvements to such diverse products as plastics, petroleum greases, water-repellent fabrics and coatings for textiles, paper, packaging materials.

New ideas for using Santocel turn up almost every day. That's why we want you to know about it. Maybe yours will be the twentieth industry to gain important new advantages from its use.

Santocel is almost light as air. A breath will set its particles afloat. Each particle is actually the skeleton of a grain of sand, produced by acid, alkali, heat and pressure. This opalescent, feather-weight solid is a structure of microscopic cells that act as tiny air-traps... 90% of its bulk is air.



40% more storage space in your new Santocel insulated refrigerator. Wall and door thickness can be reduced one-half; the usual 6.5 cu. ft. unit when insulated with Santocel, can offer 9 cu. ft. storage... 2.5 cu. ft. greater capacity, without occupying more kitchen space and without any loss in efficiency.

...and think what Santocel means in refrigerated air, rail, motor transport... less dead space, less weight, more payload!



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Gilmer BELTS

Gilmer V-Belts are easy to sell, and they stay sold. That's because they fit perfectly, retain their fit, and give dependable service. And there's a Gilmer V-Belt for every air conditioning and refrigeration unit, for the largest assortment of V-moulds in the world.

Gilmer V-Belts are supplied in carefully chosen assortments that minimize capital investment. Stock rugged, long-lived, efficient Gilmer V-Belts. Get in touch with your jobber today.

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Division of United States Rubber Company

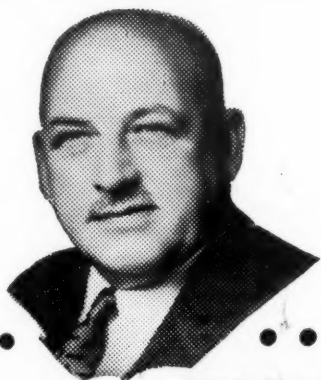
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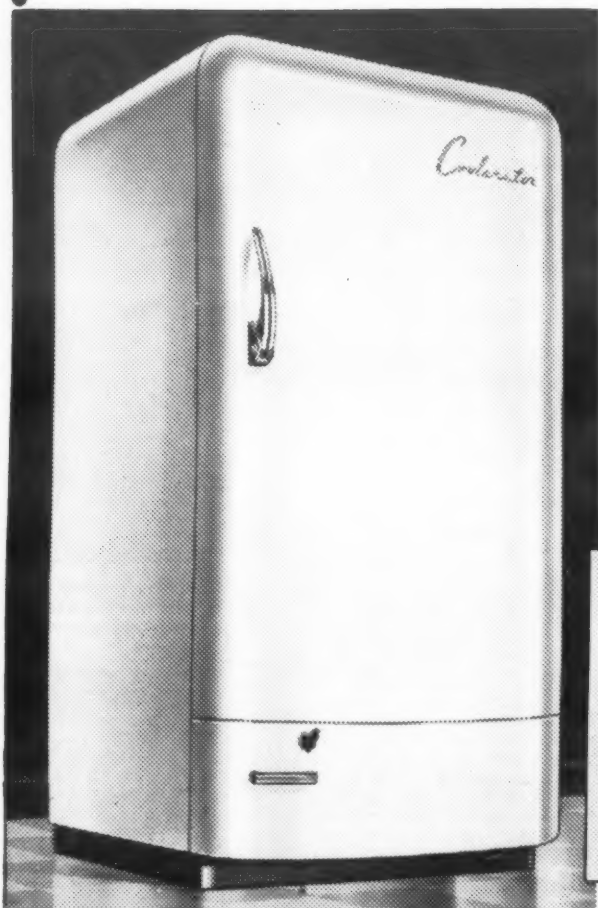


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Vice Pres. and
Gen. Sales Mgr.
The Coolerator Company

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'Profit Jackpot' right now**

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- ★ NEW POSTWAR ALL-STEEL CABINET
- ★ PLENTY OF PURE, TASTE-FREE ICE
- ★ EXCLUSIVE 4-WAY CIRCULATION KEEPS FOODS FRESH AND TASTY LONGER
- ★ COLD STORAGE TYPE INSULATION
- ★ LARGE SPACE FOR BOTTLES
- ★ ROOMY 5 1/4-CU. FT. FOOD STORAGE

Yes, here's your chance to cash in on Coolerator's Ice Refrigerator! Now in production . . . speedy delivery. You can depend upon Coolerator, the one big name in the ice refrigerator business, to produce only fast-selling models at popular prices! Look at Coolerator's sales record. Hot weather will soon be here and the need for good refrigeration will be desperate.



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DULUTH 1, MINNESOTA
Manufacturers of Ice and Electric
Refrigerators . . . Home and Farm Freezers

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Five Years To Live?

IN England, some observers of the international scene are said to be taking bets (at suitable odds, of course) that World War III will begin two, three, or five years from now.

Have the Old Men of Lloyds lost their touch? We think so!

War—five or ten years from now? No deal. No nation wants war, or can support it. All the sharp talk by top politicians is mere window-dressing to cover up failures and unrest at home.

Even so, the peoples of the world are most uneasy about this "sharp talk."

Currently we are enjoying the Shortest Peace in History, it seems.

Never in the previous history of the world have informed people been so pessimistic and so resigned to the quick renewal of warfare.

International disagreements have become so open so quickly that World War III is now accepted by too many as being "inevitable" a full 10 or 15 years ahead of its appointed time in the standard cycle of human events.

"The world can't live in a house divided against itself—half slave, half free." That's the slogan which has been revived, today. People are saying that the totalitarians eventually will wage war against the free enterprisers, that the two systems just can't live together in the same world.

Russia, the largest example of a "slave economy" extant, has been doing little to abet peace amongst nations.

On the contrary, this menacing colossus of peoples and powers has been grabbing all she can, while the grabbing is good.

An imperial England, striving to hold body-and-soul together, has been doing her best to stave off dissolution by hanging onto her "spheres of influence" for dear life.

America has taken new territory—blood-won, to be sure—also.

What does it all add up to, this continuation of warfare by diplomatic means?

Can we live our lifetimes out in peace, in this atomic-bomb age?

That we doubt, some of us. We read the headlines, we look at the charts, and we become pessimistic.

Western civilization, as Oswald Spengler has predicted, seems hell-bound to snuff itself out.

Shall we, then, choose a life of utter ease—doing as little as possible, and suffering as little as we can?

On the contrary. We are now face-to-face with the greatest challenge any sensitive, intelligent, hopeful clan of thinking humans ever has faced.

Let's achieve all we can, as individuals. And then let us strive our best as national entities to erase the prospect of that supposedly inevitable ruin which the pessimistic philosophers forecast.

This we can do by reviving the Golden Rule, and by producing and distributing more goods to more people, so that they may lead happier lives.

That era of atomic destruction just can't happen.

"The People" of all Nations aren't that dumb—we hope!

But hungry people, dissatisfied people, are warlike people. We can all help keep the peace by producing and distributing greater and greater quantities of our industry's products.

By exporting our higher living standards, perhaps we can also export the American Way of Life.

Boddie & Johnson Opens 'All Glass' Appliance Store in Montgomery

MONTGOMERY, Ala.—Boddie & Johnson Home Appliances is the name of a new "all glass" appliance store opened on Montgomery Street here in late March.

For attracting attention of bus passengers and sidewalk traffic on the city's main street, the store was remodeled from a former enclosed shop into a huge showcase with all walls of panes of plate glass. Not only appliance displays but the service shop itself is "completely exposed" to passersby through the postless glass windows, and all doors are likewise the plate glass variety with plastic frames and handles.

Fluorescent daylight lighting to 60 foot candles at every point, plus the extreme visibility of refrigerators, deepfreezers, ranges, etc. displayed against blue background makes the shop a spot of blazing color at night.

Regular demonstrations of home freezers, laundry equipment, etc., will be carried out in the store with the assurance that not only prospects inside the store but sidewalk traffic can see such operations. The store measures 20 x 50 ft.

OPA Sets Ceiling Prices On 8 Birtman Washers

CHICAGO—New ceiling prices for eight models of washing machines manufactured by Birtman Electric Co. here were recently announced in an OPA order which raised to 16.5% the 7.7% increase authorized the manufacturer by section 5 of MPR 86.

To compensate for the increased prices of washers sold to them, distributors pricing under rules 5 and 6 of section 15, MPR 86, are permitted to add the following amounts on sales to dealers:

Model No.	
B22	\$2.23
BP22	2.48
B109	2.40
BP109	2.66
B125	2.97
BP125	3.23
BT125	3.19
BTP125	3.46

New retail prices are as follows:

Model No.	Zone 1	Zone 2	Zone 3
B22	\$55.20	\$60.20	\$ 65.20
BP22	60.45	65.45	70.45
B109	62.35	67.35	72.35
BP109	67.65	72.65	77.65
B125	82.95	87.95	92.95
BP125	88.20	93.20	98.20
BT125	88.15	93.15	98.15
BTP125	93.45	98.45	103.45

These price adjustments are authorized by Order 130 under Revised Supplementary Order 119.

Appliance Store Started By Bill Farha in Bristow

BRISTOW, Okla.—Bill Farha has opened the Farha Appliance Store here with Ralph J. Roberts as manager. The store will handle a complete line of electrical appliances.



NATIONALLY ENDORSED

No scratches—no mars—no delivery woes, when that shiny new refrigerator is protected by a Mastercraft Adjustable Refrigerator Pad. Sturdily constructed, it provides ample protection. It's economical, too, only \$11.75 each, and it's adjustable to any size cabinet.

The Mastercraft Adjustable Carrying Harness at \$8.50 each makes delivery of your refrigerator easy.

Attractive lettering of your name on pad at \$2.00 each extra.

Write today for complete folder and prices on pads for refrigerators, home freezers, washers, ironers, ranges, radios; also furniture pads and protective slipcovers.

BEARSE MANUFACTURING CO.
Incorporated 1921
3815-3825 Cortland Street
Chicago 47, Ill.

35 Charleston Appliance Dealers Form Group to Promote 'Fair Trade Practices'

CHARLESTON, N. C.—The Appliance Dealer's Association, composed of 35 prominent appliance dealerships in this area, was formed here recently, as the first step in assuring "fair practices" in appliance promotion and selling throughout the Charleston district.

First act of the association was to adopt a standardized "priority registration" policy, whereby prospects will be allowed to register their names only with one dealer, whoever is closest.

Members all are appliance men set up for many years of business, and are required by their association by-laws to maintain attractive stores without conflicting sidelines, to handle top lines of major appliances, maintain reasonable prices in line with the rest of the group, and to use the same credit system. The group will also standardize service operations to give the best possible deal to customers, and will rule on trade-in

appliance methods in the future.

At the first meeting, Jim Hood of the Hood Myers Electric Co. was elected president; Paul Quattlebaum, Jr., of Quattlebaum Electric Co., vice president; T. M. Beshere, of the Charleston Farm & Home Supply, secretary-treasurer; J. P. Connolly of South Carolina Power Co., and R. B. Rustin of Rustin Furniture Co., directors.

There are approximately 15 more firms likely to join, according to Mr. Beshere, including several allied commercial refrigeration and gas appliance firms in the area. The group will hold regular meetings monthly.

Firm to Erect Freezing Plant

LYNDEN, Ore.—A new quick-freezing and storage plant of reinforced concrete construction will be erected here for the Baker Cold Storage Co. by the Austin Co.

Buffalo Store Plans Larger Appliance Dept.

BUFFALO—Kobler & Miller Home Furnishings Store, 318 Genesee St., is constructing one of the largest and most modern appliance departments in Western New York. The new department, which will feature electric refrigerators, is expected to be completed about May 10.

The department will handle all type of appliances, and will have its own manager and sales force.

Unique design, lighting, and coloring will feature the department. The ceiling will be dropped on each side of the building to represent an overhang. Refrigerators will be set under this dropped ceiling near the wall and indirect lighting will strike the front of the refrigerators. Three-light control will be provided.

Ceiling of the store itself is 15 ft. Floating islands will be swung below the ceiling to provide indirect lighting. This will look like a false ceiling suspended in mid-air. The ceiling and false ceiling will be painted red with the side walls a shade of

light green, making an unusual color effect.

Ribbon glass stairways will lead up and down from the second floor. The expansion represents an investment of many thousand dollars and will give the department about 2,400 sq. ft. of floor space.

This is another step forward in the improvement program of Kobler & Miller which five years ago constructed a completely new store front.

Servel Appoints Floyd & Co. New Cincinnati Distributor

CINCINNATI—Floyd & Co., Cincinnati, has been appointed exclusive distributor of Servel products in the Greater Cincinnati area, George S. Jones, Jr., vice president and general sales manager of Servel, Inc., Evansville, Ind., announced March 9.

Morris Floyd who heads the company has been located in Cincinnati since 1929 and has been engaged in heating and air conditioning business. He is a member of the American Society of Heating and Ventilating Engineers, and the University Club.

The most dramatic advertising campaign in Philco history! Breaking now in all leading weekly and monthly magazines.

PHILCO

...the greatest refrigerator of all time!
Compare and judge for yourself

War Trophies Stop Traffic for Appliance Dealer

ROSWELL, N. Mex.—Purdy Furniture Co. here, believes that display windows should be kept full of active interest at all times—even though no appliances are available for the purpose.

Therefore, D. M. Purdy, head of the store, has kept up a policy all through the war and ever since of keeping two windows trimmed with "general interest displays." Perhaps the most effective as a major interest-builder was a huge display of German war souvenirs brought back

from the European theatre by Sgt. Ray Glick of Roswell.

All of the items were insured and kept polished or cleaned up to new appearance, resulting in a cross-section of German military equipment which drew the attention of thousands. A card at the rear read "Soon we will fill up this window with brand new appliances—watch this space for something always interesting."

Mr. Purdy believes this idea has attracted many potential buyers.

Croswell Joins Admiral Advertising Staff

CHICAGO—Seymour Mintz, director of advertising and publicity, announced last week that Harry V. Croswell has joined the Admiral Corp. as assistant advertising manager.

Mr. Croswell was formerly employed by Osborn, Scolaro, Meeker & Co.

Prior to that, he was connected with the *Chicago Daily News*, according to the announcement.

Admiral Radio Production Ahead of Schedule

Refrigerator Output Lags 50% Under Planning

CHICAGO—Admiral Corp. is running ahead of schedule in its radio manufacturing division, it was revealed in the company's annual report for 1945, just issued.

The report shows net earnings, for the year ending Dec. 31, 1945, of \$711,310.15, equal to 79 cents a share on the 900,000 outstanding shares of common stock. This net is slightly lower than 1944's earnings of \$723,968.56.

A decline in sales from \$40,659,803.80 for 1944 to \$30,533,756.46 in 1945 was the result of cancellation of war contracts. The company was completely occupied with war production during 1944 and most of 1945 as well.

Reconversion for peacetime manufacturing, the report states, is practically completed, and represents the expenditure of \$1,000,000 in plant and property expansion and new tools and dies. All tools and dies acquired from Stewart-Warner Corp. for the manufacture of Dual-Temp refrigerators and of the electric ranges formerly made by Stewart-Warner Corp., have been discarded. New tools, dies, and machines for the manufacture of redesigned postwar models of these appliances have been installed and represent an outlay of \$650,000.

STRIKE CUTS VOLUME

Because of the steel strike, the report continues, the manufacture of refrigerators is 50% behind anticipated volume and the manufacture of ranges will be delayed until the latter part of the second quarter.

In the radio division, where production has been running ahead of schedule, the current shortage in wood cabinets was foreseen well in advance, the report states, and Admiral has protected itself, therefore, by pioneering the development of the largest plastic molds ever to be used in the production of a radio cabinet.

From a profit viewpoint, the report adds, "The prospects are not quite so encouraging. Pricing by OPA has been based on production and labor efficiency experienced in 1941. Today we are confronted not only with much higher labor costs, but more importantly, with lowered efficiency where in the inability to obtain component parts in adequate volume hampers the economical operation of production lines."

CAUSES OF RETARDED OUTPUT

Retarded production in all instances, the report states, is due to strikes among suppliers and in basic industries, such as steel, and not to direct labor problems within the company.

"As to your company specifically," the report declares, "Labor relations fortunately have been excellent. Employees cooperated wholeheartedly throughout 1945 especially in meeting the exceedingly difficult schedules imposed by wartime production."

The company's postwar selling organization, the report shows, consists of more than 15,000 franchised dealers, of whom 12,000 also will handle Admiral refrigerators and home freezers, and 10,000 Admiral electric ranges.

Cleveland Sales Head



J. E. BRICKENDEN

Hotpoint Selects 2 For Cleveland Posts

CHICAGO—J. E. Brickenden has been named district sales manager and E. J. Mack commercial cooking equipment specialist for the Cleveland district, Edison General Electric (Hotpoint) Appliance Co., with offices in the Union Commerce Bldg.

Mr. Brickenden resumes as a sales official after the wartime interruption, to his former duties as a range and water heater specialist at Cleveland. Mr. Mack was with the Cleveland Illuminating Co.

Perfex Corp. Announces 33,664 Stock Issue

MILWAUKEE — A registration statement has been filed with the Securities and Exchange Commission for 7,500 shares of 4½% cumulative preferred stock, par \$100, and 26,164 shares of common stock, par \$4, by the Perfex Corp., manufacturer of automatic controls, engine cooling radiators, and heat exchangers here.

The common stock is being offered to common stockholders on the basis of one share for each five shares held at a price to be filed by amendment.

Unsubscribed common shares and the preferred stock will be offered to the public by underwriters, headed by the Wisconsin Co., at prices also to be filed by amendment.

Hollister Heads N.Y. Branch For General Controls Co.

NEW YORK CITY—Appointment of Edgar P. Hollister as manager of the New York factory branch was recently announced by J. F. Ray, director of sales, General Controls Co., Glendale, Calif.

Mr. Hollister was formerly associated with the Bendix Aviation Corp.

Graybar Names Schroder

SPOKANE, Wash.—L. V. Schroder was recently appointed general merchandising manager for Graybar Electric Co. here. Mr. Schroder was formerly educational supervisor at Frigidaire Sales Corp., Portland, Ore.



FIBERGLAS INSULATION

Helps Protect

"FROZEN ASSETS"

The Amherst Quick-Freeze Corporation's locker plant at Williamsville, N. Y., is completely Fiberglas insulated.

Fiberglas Insulation Materials with their high thermal efficiency were used in the floors, walls and ceilings of the freezer, aging and locker rooms.

As Fiberglas is glass in fiber form, it offers many advantages to locker plant operators in addition to its exceptional insulating values. Being glass it is odorless, and will not absorb odors in service. It will not rot or decay and offers no sustenance for insects, vermin or rodents, and it can be applied easily, quickly and economically.

Fiberglas Insulation for low-temperature jobs is produced in a form to meet every application requirement to solve virtually any temperature control problem. Be sure to have complete information about Fiberglas Insulation Materials. Write for descriptive literature today. Owens-Corning Fiberglas Corporation, Dept. 1848, Toledo 1, Ohio. Branches in Principal Cities.

In Canada: Fiberglas Canada Ltd., Oshawa, Ontario.

Four FIBERGLAS products for low-temperature work

Fiberglas A-E (Asphalt-Enclosed Board)—Fine glass fibers, compressed, treated with binder and enclosed with a tough asphalt coating to form 12" x 36" insulating blocks.

PF (Pre-Formed) Insulation—Widely used for domestic and commercial refrigerators, display cases, coolers and other low-temperature equipment. In 24" x 48" flexible pre-formed batts and rigid blocks.

Insulating Wool, Type TW-F—A soft, resilient, lightweight insulation available in roll, batt, bulk and shredded forms. Applicable to temperatures from sub-zero to 1000° F.

PF Pipe Covering—Molded Fiberglas pipe insulation for application on brine and other cold lines according to specifications. Comes in 3-foot sections for all standard pipe sizes up to 30" diameter.

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FIBERGLAS

U.S. REG. U.S. PAT. OFF.

THE SECOND INTERNATIONAL EDITION—1946

Refrigeration and Air Conditioning Directory

Business News Publishing Co., 450 West Fort St., Detroit 26, Mich.



Appointed by Electric Power Equipment Corp.



M. J. MEIKLEJOHN

M. J. Meiklejohn Becomes New Regional Manager

PHILADELPHIA — M. J. Meiklejohn, formerly production manager of the Spencer Thermostat Co., has been appointed New England regional manager for the Electric Power Equipment Corp., manufacturer of Green Dragon commercial refrigeration equipment.

Prior to the war, Mr. Meiklejohn contacted wholesalers and service engineers in New England for a refrigeration manufacturer, and for two years he headquartered in Dallas, Tex., developing that territory.

During the war he served as works manager of the Philadelphia Mobile Shop Depot.

Carrier-Bock Occupies \$75,000 Quarters

DALLAS, Tex.—Carrier-Bock Co., local distributor for Carrier Corp. and Lennox Furnace Co., moved into its recently completed \$75,000 one story building containing 11,000 sq. ft. of floor space, 9,000 sq. ft. of which are devoted to shop and warehouse facilities, announced I. I. Bock, owner.

Offices and showroom of the building, located at 2133 Cedar Springs St. here, are air conditioned by a 7½ ton Carrier unit. This is Carrier-Bock's third expansion move, Mr. Bock stated.

Christy Co. Offices, Warehouse Moved to New St. Louis Site

ST. LOUIS—Christy Co., manufacturer of "Centraz" Vapor-Seal, is moving its offices and warehouse to 4464 Duncan Ave. here, announces William T. Christy, president.

The new building, located on a railroad siding, provides excellent receiving, shipping, manufacturing, and storage facilities, thus improving the organization's ability to better service its trade, according to Mr. Christy.

The company formerly was situated at 1530 Olive St. in this city.

Luminaire Conditioner Gets \$485 OPA Retail Ceiling

WASHINGTON, D. C.—A retail ceiling price of \$485 has been approved by OPA for the Luminaire conditioner manufactured by National Engineering & Metals Co. here. Equipped with a water-cooled, ½-hp. condensing unit, the conditioner will sell for \$242.50 to distributors and \$291 to dealers. The price schedule was fixed by Order 350, MPR 591.

OPA Assigns Prices on 4 Divider Assembly Shelves

CHICAGO — Order 352, recently issued by OPA under MPR 591, sets ceiling prices to be used by Brunswick-Balke-Collender Co. here in sales of four types of its shelves for divider assembly for refrigerators. The price schedule follows:

Model No.	On sales to—			
	Dis-tribu-tors Each	Deal-ers "A" Each	Deal-ers "B" Each	Con-sum-ers Each
9026 (package of 36 pieces)	\$23.76	\$28.51	\$31.68	\$ 1.32
90446 (package of 6 pieces)	39.60	47.52	52.80	13.20
26 (package of 12 pieces)	16.11	19.33	21.48	2.68
18 (package of 12 pieces)	12.28	14.73	16.26	2.04

Schmidt Walk-In Cooler Parts Ceilings Listed

CINCINNATI—The following walk-in cooler parts manufactured by the C. Schmidt Co. here were ceiling priced by OPA in Order 363, MPR 591, at these levels for sales to distributors, dealers, and consumers:

Item No.	On sales to—		
	Dis-tribu-tors	Deal-ers	Con-sum-ers
A—Entrance door wall section	\$84.40	\$88.80	\$168.80
B—Wall with 1 glass service door	41.45	43.60	82.96
C—Wall with 2 glass service doors	81.20	85.45	162.40
D—Wall with 1 paneled service door	36.00	37.95	72.00
E—Wall with 2 paneled service doors	65.75	69.20	131.50
F—Plain wall	16.60	17.50	33.20
G—Corner Post	10.25	10.75	20.50
H-1—5'6" end top and bottom	20.60	21.70	41.20
J-1—5'6" center top and bottom	18.35	19.30	36.70
H-2—7'11" end top and bottom	24.20	25.45	48.40
J-2—7'11" center top and bottom	21.50	22.70	43.00
H-3—10'3" end top and bottom	31.50	33.15	63.00
J-3—10'3" center top and bottom	28.25	29.75	56.50
K-1—Floor rack 2'4" x 4'8"	2.55	2.65	5.10
K-2—Floor rack 2'4" x 7'0"	3.90	4.10	7.80
K-3—Floor rack 2'10" x 9'4"	6.15	6.45	12.30
L-1—Meat rack 4'8" including upright rails	9.30	9.75	18.60
L-2—Meat rack 7'0"	11.30	11.90	22.60
L-3—Meat rack 9'4"	15.20	15.95	30.40
L-4—Meat rack 11'8"	17.75	18.65	35.50
M-1—(4) shelves 4'8"	25.75	27.10	51.50
M-2—(4) shelves 7'0"	36.50	38.40	73.00
M-3—(4) shelves 9'4"	47.45	49.95	94.90
M-4—(4) shelves 11'8"	58.00	61.15	116.00
N—Crate for square ft.	.23	.25	.46
Addition for porc. entrance door section	21.40	22.50	42.80
Addition for porc. on 1 door service section	11.40	12.00	22.80
Addition for porc. on 2 door service section	11.05	11.65	22.10
Addition for porc. on plain section	11.50	12.10	23.00

U.S. Research Station Offers Opinion on the Storage of Pork Items

BAKERSFIELD, Calif. — Locker users who are customers of 14 locker plants in this area were told that it is safe to store pork under refrigeration by the U. S. Department of Agricultural Research station here.

Many customers were dubious about such storage following reports of several trichinosis cases in Kern county, according to locker plant

operators who took steps to get accurate information on the subject.

Following the government investigation, a report issued by the research station through Miss Dorothy Wilkinson, Kern county home demonstration agent, was posted on bulletin boards in all locker plants. The report, in part, follows:

"The investigations here described established . . . the complete safety from trichinosis infection of pork that is thoroughly cooked or pork refrigerated at 5° F. for at least 20 days. . . ."

Following the prominent display of this report in locker plants, a marked increase was noted in meat storage.

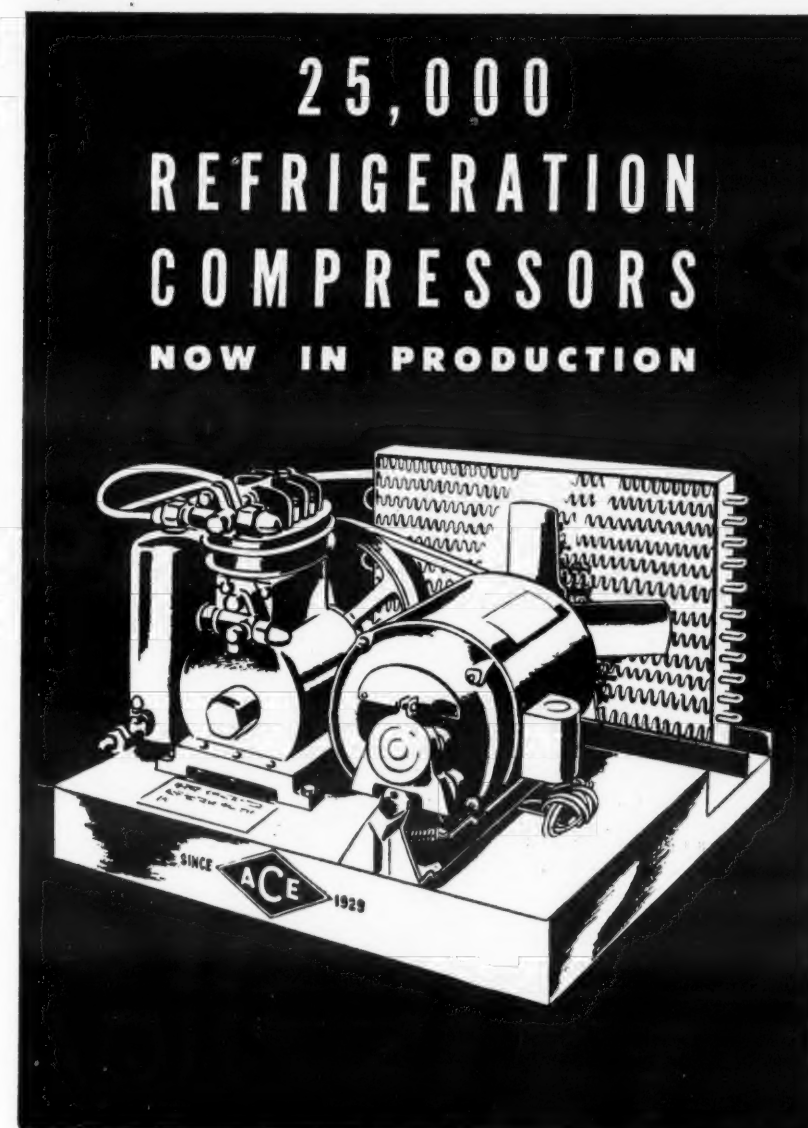
New Haven Dealer To Handle Carrier Lines

SYRACUSE, N. Y. — Connecticut Cooling Corp., 205 South Orange St., New Haven, Conn., has been appointed exclusive dealer for Carrier Corp. in the New Haven area, handling comfort air conditioning, industrial air conditioning and refrigeration, commercial refrigeration, and packaged air conditioning and refrigeration.

This was announced recently by Arthur P. Shanklin, a vice president of Carrier Corp.

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Two New Frozen Food Plants for Walla Walla

WALLA WALLA, Wash.—Plans are underway for the construction of quick freeze plants in this city and in Stockton, Calif., by the Libby, McNeill & Libby Co., and the National Ice & Storage Co., respectively.

A \$30,000 wooden structure, 40 x 60 ft., will be built by the former organization at its cannery in Walla Walla, and completion is expected by pea processing time this season, according to R. D. Lockard, manager. Experimental work on fruits and vegetables will be done by the company in its quick freeze department, in addition to the handling of seasonal young peas now used in prepared baby foods.

Having for the last three years shipped Walla Walla frozen peas for the preparation of baby food at its Sunnyvale, Calif., and Chicago plants, with the freezing being done at Freewater, the company will do the work at the new plant, upon its completion.

Two buildings for the preparation, quick-freezing, and storage of farm produce are planned by the National Ice & Storage Co., to be located in Stockton, Calif.

A \$64,000 quick-freezing and storage structure, measuring 50 x 100 ft. and accommodating 60 carloads of produce will enlarge the ice firm's facilities.

In addition, a \$17,000 one-story processing plant is being built, and will be operated by the Delta Packers, Inc.

Kentucky Locker Plant License Bill Awaits Governor's Okay

FRANKFORT, Ky.—A bill providing for licensing and regulation of frozen-food locker plants was given final passage recently by the Kentucky Legislature and sent to Gov. Simeon Willis for signature. The state commissioner of agriculture is charged with enforcement of the measure.

\$985 Price Set For Rowe & Thompson's 8-Ft. Display Case

CHEHALIS, Wash.—Authorization of a retail ceiling price of \$985 for an 8-ft. refrigerated display case manufactured by Rowe & Thompson here was recently granted by OPA in Order 351, MPR 591. Other prices on the case, Model L-S, are \$591 to distributors and \$650 to dealers.

Kay Refrigeration, Inc. Gets Ceiling on Case

DETROIT — Kay Refrigeration, Inc., here was recently given a retail ceiling price of \$1,128.80 by OPA for its Model K1846 food display case. Order 349, MPR 591, also established these other ceilings: to distributors, \$564; to dealers, \$752; to jobbers, \$677.

Stratosphere Freezing Now Getting a Trial

NEW YORK CITY—Freezing of foods en route during air shipment by traveling at great heights is the basis of an experiment being conducted by Air Cargo Transport Corp., in an effort to establish a new type of business.

The tri-weekly flights, in which several hundred pounds of strawberries are flown from Florida here, will cover a period of about six weeks. Results of the experiment, which is being undertaken in cooperation with Frozen Food Institute here, will be announced at the organization's annual meeting.

Cost of equipping planes with refrigeration to prevent softening of the produce as the plane descends into warmer levels is one of the main problems involved, the solution of which will determine to a great extent whether or not stratospheric freezing of foodstuffs may become commercially practicable.

Having been organized a year ago for the sole purpose of offering shippers air shipment anywhere in the United States, Air Cargo Transport flies no regularly scheduled runs, and handles no passengers or mail.

New Store For Little Rock

LITTLE ROCK, Ark.—The North Little Rock Tire & Supply Co. has opened its new store at 405 Main St. here, handling General Electric refrigerators and other appliances.

New Evaporator Design, Special Tray on Lid In Detroit Firm Freezer

DETROIT—Orley Bros. here this week announced introduction of a 5-cu. ft., two-temperature home freezer described as permitting both sharp freezing and storage through use of what it calls "the 'speed-flo' principle of coolant action."

Joe Orley, president of the firm, said production of the new freezer is scheduled to get under way May 1 at one of the Orley plants here. Floor models are now ready for shipment, he stated.

In its introductory announcement, Orley Bros. labels the "speed-flo" principle "a first in the freezer industry" and claims it "assures 'sharp freezing' essential to maintain freshness of food flavor."

Questioned by The News, Mr. Orley said he was "not at liberty at this time" to elaborate upon details of the system. He stated that an explanation of the principle would be released at a later date.

According to Mr. Orley, a storage temperature of 0° is maintained in the front part of the unit and a freezing temperature of -10° on two plates across the rear section. The evaporator is described only as of a "no coil" aluminum type.

A patented "Handeez-Tray," which is attached to the underside of the lid and swings out of the freezer's upper front half as the cover is raised, is pictured as a unique feature. It is intended to provide "instant accessibility to often-used foods and keep all parts within easy reach."

The unit is said to provide 8½ sq. ft. of horizontal prime freezing surface. This, Mr. Orley asserts, "is one third more prime freezing surface than conventional units of the same capacity."

Other claims made are that Fiber-Glass insulation prevents cold-loss for as long as 72 hours in event of power failure, that a special "moisture-mizer" prevents accumulation of moisture throughout the cooling system, and that no defrosting is necessary.

Fan cooled, the hermetically sealed condensing unit is of ½ hp. "Freon-12" is the refrigerant used.

Insulation of the cabinet walls makes the freezer moisture proof and vapor proof, it is claimed. All seams are said to be permanently sealed to prevent leaks.

Termed "a radical departure from conventional home freezers," the unit is described as having these other features: interior constructed of aluminum and plastic; exterior of white baked enamel with miscellaneous hardware of stainless and chromed steel; table-top height and rounded corners; an "easy-lift" lid with an automatic check; and a flat top for extra working surface.

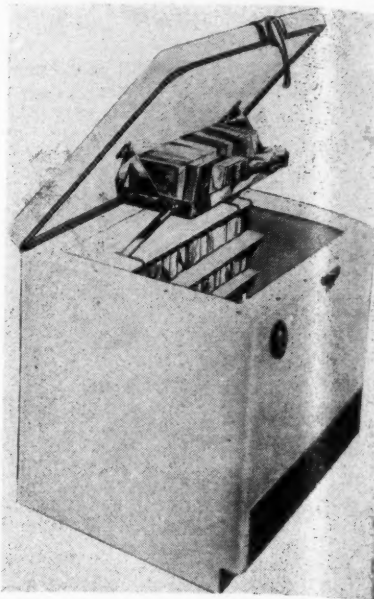
Mr. Orley explained that the freezer is the result of four years' experimentation. It has undergone thorough tests, he declared.

The company said no accurate production figures could be released because of their contingency on the uncertain motor and material-delivery situation.

It was announced that distributors are now being appointed.

In addition to Joe Orley, officers of

Something Different?



Some unusual design features mark the Orley Bros. freezer. Note the tray attached to the lid, and plate-type shelves across the rear of the cabinet.

the firm include George Orley, vice president, and Graham Orley, treasurer. M. J. Solomon, formerly associated with Chrysler Corp. in production for several years, is general factory manager in charge of freezer production.

OPA Order 179, MPR 591 established retail ceiling of \$295 for the freezer; on sales to distributors and dealers the maximum prices are \$147.50 and \$177, respectively.

General Foods Plans Big Freezing Plant Expansion

NEW YORK CITY—Of the \$17 million earmarked for plant construction, modernization, and equipment by General Foods Corp. here, more than \$4 million will be expended on quick freezing plants in Walla Walla, Wash., Caribou, Me., Pocomoke City, Md., and Rockland, Me., according to the corporation's annual report for 1945.

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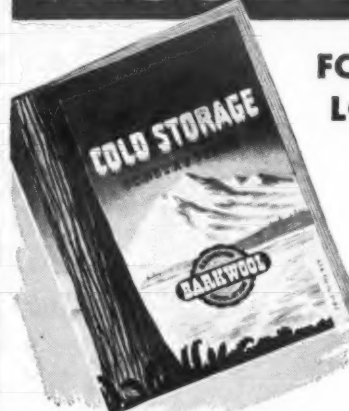
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- (2) 16 Ga. steel evaporator, all prime surface.
- (3) 16 Ga. steel partitions, extra cooling surface.
- (4) 20 Ga. stainless steel sales compartment top.
- (5) Glossy white enamel finish, easy to clean.
- (6) 6-inch water repellent certified insulation.
- (7) 20 Ga. all-steel superstructure with spot-welded price runners (holds 54 price-strips).
- (8) Polished plate glass mirror for extra display.
- (9) Indirect, non-glare fluorescent lighting.
- (10) Removable superstructure for easy shipping.
- (11) Large capacity sales compartment (20 cu. ft.).
- (12) Low compressor capacity requirement.
- (13) Insulated night cover, waterproof, removable.
- (14) Outside dimensions: Length, 84 inches, Height 75 inches, Width 33 inches.

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Freezer Prices

Goodyear 35-Ft. Model

AKRON, Ohio—A maximum retail price of \$950 has been set by OPA for a 35-cu. ft. farm freezer manufactured by Goodyear Aircraft Corp. here.

Powered by a 1/2-hp. condensing unit, the freezer is priced at the following other ceilings: \$427.50 to wholesalers; \$475 to distributors; and \$570 to dealers. Maximum prices for the unit, Model No. 350, were fixed by Order 342, MPR 591.

3 Dew Freeze Units

ST. LOUIS—OPA's ceiling prices for three models of the Dew Freeze No. 6 farm and home freezer manufactured by Engineering & Manufacturing Co. here are contained in Order 340, MPR 591, recently issued by the agency.

The ceilings are as follows:

Model	On sales to— Dis- tribu- tors	Deal- ers	Con- sumers
No. 6-6.2 cu. ft. 1/2 hp. con- densing unit	\$152.50	\$183.00	\$305.00
No. 20-20 cu. ft. 1/2 hp. con- densing unit	297.50	357.00	595.00
No. 15-15 cu. ft. 1/2 hp. con- densing unit	260.00	312.00	520.00

Minneapolis Showcase

MINNEAPOLIS—Ceilings of \$498 to consumers, \$249 to distributors, and \$299 to dealers were recently authorized by OPA for sales of an 18-cu. ft. farm and home freezer manufactured by Minneapolis Show Case & Fixture Co. Maximum prices were established for the freezer, which has a 1/2-hp. condensing unit, by Order 344, MPR 591.

\$492 For Vertical Job

PHILADELPHIA—Approval of a retail ceiling price of \$492 for a 14.5-cu. ft. vertical home freezer, less compressor, manufactured by Murdoch, Inc., here was recently granted by OPA in Order 345, MPR 591. The box is priced at \$246 on sales to distributors and \$295 to dealers.

Hackett Electric Co.

PITTSBURGH—Hackett Electric's 10-cu. ft. low temperature cabinet, powered by a 1/4-hp. condensing unit, will sell at ceilings of \$430 to consumers, \$215 to distributors, and \$248 to dealers, according to Order 346, recently issued by OPA under MPR 591.

Freezer Warning Device



This is a warning device that sounds when temperature reaches the danger zone in any low temperature equipment. The thermo-switch is placed in the low temperature chamber and the warning device can be placed anywhere.

'Freezalarm' Sounds Off On Temperature Rise

DAYTON, Ohio—Freezalarm, a self-contained warning device for home and commercial freezers and locker plants that is claimed to sound immediately and automatically when the temperature approaches the danger zone from any cause, such as current failure, poor connections, belt breakage, loss of refrigerant, or motor failure, has been designed and marketed by the Freezalarm Co. here.

The complete unit is Freezalarm, thermo-switch with 24 in. leads, and 6 ft. of cord with the necessary connectors. There are no capillary tubes with the warning device, reports the company. The thermo-switch is inserted into the freezing compartment and the Freezalarm hung in any part of the home, farm, or business establishment. Installation is said to take less than five minutes.

Weighing two pounds, and having dimensions of 6 1/2 in. high, 3 3/8 in. wide, and 2 3/4 in. deep, Freezalarm is encased in mottled walnut plastic. Price to dealers is \$12.35 f.o.b. Dayton, and to consumers \$21.95, the company announced.

\$60,000 Plant Planned

PORTLAND, Me.—A building permit has been issued here to Morrill's Coal & Grain Co. for a \$60,000 frozen food locker and processing plant, to be installed in the company's main building at 35 Allen Ave.

William J. Garsoe, manager of the new plant, said it would contain 600 lockers for rental to customers, and also bulk storage space for frozen foods to be sold by the company. He expects completion by June 1.

Westinghouse Survey Indicates Desire For Home Freezer Widespread Even Among Farmers Who Have a Locker

EAST SPRINGFIELD, Ill. — To effect savings in time, food, and money, 34 out of 40 farm families not now owning home freezers plan to buy as soon as the units are available, according to a Westinghouse Electric Corp. survey of 63 families living on 59 farms averaging 225 acres. The farms are located in 16 states across the nation producing anything from poultry to pecans.

Those interviewed fell into three groups of equal size; one third now use home freezers; another third resort to locker plants for freezing foods; and the final third use no freezing facilities for food preservation, reports H. F. Hildreth, manager of the refrigeration specialties department of Westinghouse.

Of the 34 families planning to add home freezers to present farm equipment, the majority give as their reason the convenience that a freezer

offers in handling frozen and stored food. Some of the farmers using locker plants at present expect to switch to home freezers, and a few plan to utilize both, it was learned.

Farmers already using home freezers expressed the advantages of: better living through year-around improved quality and variety of food, convenience in having large food stocks readily available, economy by eliminating waste, saving of time, and permitting large scale food processing.

Sizes of freezers comparable in the range of 16 to 25-cu. ft. units are preferred by farmers now utilizing home freezers or locker plants, while the 6-cu. ft. model appeals to farmers planning to inaugurate the home freezing of foods, according to the survey.

The amounts of food frozen on farms where home freezers are avail-

able is said to exceed the average of frozen food stored in off-premise food lockers. All users of home freezers agreed, states Westinghouse, that freezing is cheaper than canning, it made the food taste better, and it resulted in savings in time and labor compared with other preserving methods.

\$300,000 Cold Storage Plant For Panama

PANAMA CITY, Panama — Construction is progressing in a suburb of this city on a \$300,000 refrigeration and cold storage plant being erected by the Republic's largest retail food concern. Export of fruits will be permitted by the plant, which also includes a mill equipped for the processing and packaging of Panamanian-produced rice.

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- Plastic type lid gaskets seal in cold
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- An adequate freezer compartment for home processing with special coils for quick, full capacity, sub-zero freezing
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- 5" of proven insulation in bottom
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HOME-FREEZ (MODEL 18)

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● In 1942 only a few home freezer manufacturers were listed by a WPB study. Quillen Bros. was among the few, having already built an enviable reputation in the refrigeration industry. Of the 50,000 home freezing units in use prior to the war, a significant percentage of them were Quillen Freezers... still giving good service today.

Quillen was selected to produce portable refrigerating units for the armed forces and their entire output during the war was devoted to this.

This continuity of experience has given Quillen Bros. the opportunity to apply the knowledge thus gained to the manufacture of a home freezing unit that is most expertly engineered. If you want to get in the home freezer business RIGHT, you'll want the product of a specialist, Quillen Bros.

Quillen Bros. Refrigerator Company

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Triethylene Glycol Acts as Dehumidifier In New Air Conditioning System Design

NEW YORK CITY—Industrial and commercial air conditioning units manufactured by the Rogers Diesel & Aircraft Corp. now are in production, it has been announced by Ralph B. Rogers, president of the corporation.

Operating on a principle of chemical dehumidification the system was developed originally by New York's Research Corp. All manufacturing and selling rights were assumed by the Rogers corporation late last year.

In a Rogers-Research System, as the air conditioning units are called, humidity is controlled not by the degree of condensation on refrigerated surfaces, but through the action of a chemical absorbent, triethylene glycol. The chemical is also germicidal, and acts therefore as an air sterilizer, the company claims.

The limitations of TEG as a re-activator in humidity control are few, it is stated. Its maximum moisture-removing capacity goes up only to 75%-80% of the air's moisture content.

On the other hand, this capacity remains unchanged under any given temperatures met in the system; and there is no danger of crystallization or of solidifying in the pipe lines, since its crystallization temperature, -14° F., is far below those temperatures, the company declares.

The Rogers-Research System uses two major pieces of equipment: an absorber, which dehumidifies and

regulates the temperature of the air; and a concentrator, which reactivates the TEG.

1. The absorber's dehumidification process uses a steel shell into which a blower draws the air. The air passes over a cooling coil, through which cold water is kept circulating, and through sprays of the TEG, which rob the air of the desired proportion of its water content.

The air passes on through a spray eliminator, which removes any possible TEG it might contain, on through air filters, and then is blown out of the absorber at the relative humidity designated by the system's automatic controls.

2. The absorber's cooling process begins when the air passes over the cooling coil. The water vapor is condensed into drops of water and absorbed by the TEG. Any released latent heat is absorbed by the cooling coils themselves. Any TEG that is condensed on the spray eliminators drops back into a liquid sump source at the bottom of the encasing steel shell.

The air, as it emerges from the absorber, averages a temperature 5° above the temperature at which it entered. Automatic controls keep the emerging temperature constant.

The system's second piece of major equipment is the concentrator, which dries out the TEG. The reactivation process is continuous, according to the company. A small stream (about 25% by volume) of the TEG supply

from the absorber shell is continually bypassed to the concentrator for re-drying.

On the way to the concentrator, the TEG flows through a shell and tube type heat exchanger and reaches a temperature of about 225° F. Water boils at 212°, and the water in the TEG thus evaporates before the maximum temperature is reached, and is discharged from the system.

The heated TEG, now at high vapor pressure, is sprayed down through an upcurrent of air (drawn from the room) that robs it of its last water vapor, leaving the TEG in its original undiluted strength.

CONCENTRATOR ACTION

The air that has been warmed by contact with the hot TEG spray is used to heat the diluted TEG just coming into the concentrator for treatment. The incoming TEG, on its way to the solution heater, is routed through a reflux coil in the concentrator, and the heated air passing over this coil loses some of its heat to the diluted TEG, lightening the heater's load.

The hot air in turn loses any TEG vapor it may be carrying, and this falls to the bottom of the shell to join the reactivated TEG returning to the absorber system.

The reflux thus minimizes loss of TEG which otherwise would be carried out with the warm air, and only small makeup amounts of TEG have to be added from time to time, the company claims.

Automatic controls, of course, regulate the air temperature and relative humidity. A thermostat in the conditioned room controls an automatic valve in the inlet line of the absorber cooling coil. When room tempera-

How Conditioner Works

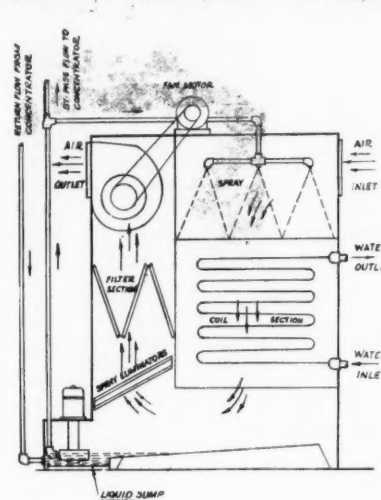


Fig. 1—Drawing showing the principle of operation of the Rogers-Research air conditioning system. Air passes first through the triethylene glycol sprays, where it is dehumidified and sterilized; then over cold water cooling coils; over spray eliminator plates which remove any triethylene glycol; through a filter section and then out to the space to be conditioned.

ture drops below the designated minimum, this valve reduces the amount of cold water entering the cooling coil.

Thus air leaving the absorber remains at a higher temperature. When room temperature rises above the desired maximum, the valve is opened by the thermostat, allowing the entry of more cool water into the coils.

Humidity is controlled by a humidistat which regulates a valve in the steam supply line to the solution heater, and a relay switch on the blower that pulls the air out of the concentrator.

As humidity rises, the steam valve opens, taking more moisture from the incoming TEG, increasing its moisture-absorbing potential; and turning on the blower.

ADVANTAGES CLAIMED

The general advantages of any system using a hygroscopic agent as claimed by the company, include the following:

1. Conditioned air is obtained at a low dewpoint and with little essential change in temperature between incoming and outgoing air.
2. Air having a dewpoint below 32° F. can be obtained without using a cooling system operating at temperatures below 32°.
3. Through the use of low pressure steam, lower operating costs are gained. Low internal working pressures are characteristic of the entire system.
4. Humidity and temperature levels are independently controlled. There is no necessity for reheating air.
5. The system is simple in principle and flexible in application. There are no moving parts except the single pump and the blowers.

Specific advantages gained through

the use of triethylene glycol as the hygroscopic agent are these, the company claims:

1. TEG is a standard, non-toxic, non-inflammable, non-electrolytic, odorless, colorless, of low viscosity, non-crystallizing as used in this system, having good heat transfer properties, inexpensive and readily available. Outstanding above these is TEG's non-corrosive qualities—it is far less corrosive than water, according to the company, and requires no inhibitors in the system, no special protection of valves or pumps or piping.

2. It has the property also of easily wetting and removing practically all types of dust occurring in normal air, whether organic or inorganic.

Concentrator Is Used

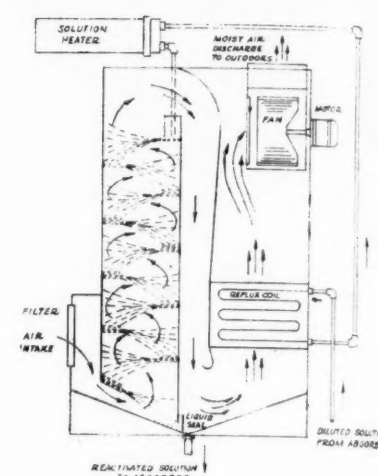


Fig. 2—The concentrator in the Rogers-Research system, in which the triethylene glycol is reactivated (about 25% of the supply of the TEG from absorber shell is continually bypassed to the concentrator for re-drying). The process depicted in this drawing is explained in the accompanying article.

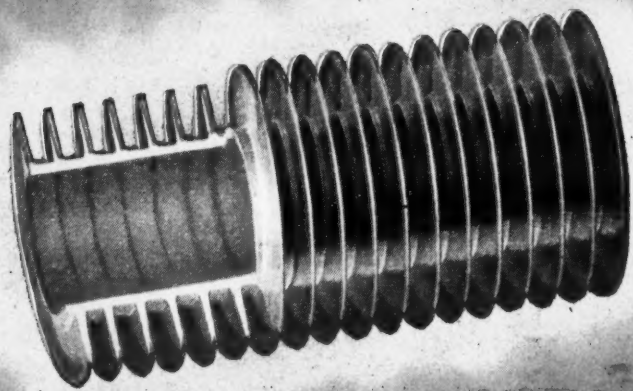
3. TEG is highly germicidal, to the extent that in vapor form it kills airborne bacteria. This is true of all the glycols, the company points out, and TEG is the most effective of the group.

In industrial applications where a constant relative humidity is essential, but air temperatures are relatively less important, the RR System will serve the entire air conditioning requirements, the company claims, so long as conditions above 25% relative humidity are called for.

This is the case in manufacturing processes for candy, many drugs, electrical equipment, explosives, films, most foods, linoleum, paint, various plastics, steel, and the like.

To meet air conditioning problems where production requires, in addition to humidity control, temperatures lower than incoming water could provide, auxiliary equipment can be used to cool the air further as it leaves the absorber. Here the dewpoint of the air in the RR System is still kept below 32° F., the company states.

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Oil Heating Industry To Gather April 23-27 In Philadelphia for First Postwar Conclave

Oil Heat Exposition Draws Record Number of Exhibits; Oil Heat Institute Meetings Scheduled

PHILADELPHIA — Sponsorship of the first postwar National Oil Heat Exposition, sessions on retail selling, various phases of engineering, and a self appraisal of the industry by some of its leaders are a few of the features of the Oil-Heat Institute of America's twenty-third annual convention scheduled for April 23-26 at the Ben Franklin hotel here, announced A. E. Hess, managing director of the Institute.

On April 22, prior to the formal opening of the exposition, business meetings of OHI directors, and directors of the distribution and accessory divisions will be held, followed by annual meetings of the two groups on the morning of April 23.

The National Oil Heat Exposition of 1946 will feature more than 232 display booths, according to C. F. Curtin, exposition manager and secretary-treasurer of OHI. The highest number of displays heretofore was 183 for the Exposition of 1941, also held here.

Annual meeting of the entire OHI is scheduled for Wednesday, April 24, at 10 o'clock, when the president's annual report and reports of other officers and committees will be heard, and the election of new directors will be held. At noon the newly elected directors will meet to elect new officers and members of the executive committee.

"Industry members are invited to the OHI annual meeting and to the annual meetings in their respective divisions, as well as to the convention sessions Thursday and Friday, April 25 and 26," said Mr. Hess.

Thursday, April 25, will be set aside as "Dealer Day," during which the retail sales session of the OHI annual convention will be held with C. R. Jonswold, chairman of the distribution division of OHI and vice president of Arrow Petroleum Co., Chicago, in charge.

A sales clinic featuring the following industry leaders will follow a speech by J. J. Nance, vice president of Zenith Radio; J. L. Minner, manager of the fuel oil department of Shell Oil Co.; W. A. Matheson, president of OHI; and William F. Kelly, vice president of the Pennsylvania Co. A film entitled "Selling America" will be shown, also.

Headed by W. A. Kemp, chairman of the accessory division of OHI and manager of the pump division of Sundstrand Machine Tool Co., a session called "The Industry Looks at Itself" will be held at 10 a.m. on Friday, April 26. A discussion of functions and committee operations of the Oil-Heat Institute of America will be carried on by:

C. E. Lewis, former president of OHI and representative of the accessory division; Mr. Matheson; A. T. Atwill, representing vaporizing type burner manufacturers; Mr. Jonswold; Mr. Hess; M. A. Powers, chairman of Technical Committee E on burner fuel oils of committee D 2 of ASTM; and F. H. Faust, chairman of the OHI engineering committee.

Subjects vital to the construction and operation of oil burning equipment will be discussed at the engineering session on Friday afternoon. Mr. Faust, who is commercial engineer of the air conditioning department of the General Electric Co. in Bloomfield, N. J., will be in charge of this session.

Authorities will speak on selected subjects, and there will be prepared rebuttal by industry engineers. A discussion panel and open forum will also be held on each subject.

The subjects and authors of the speeches on engineering are:

1. "Effect of Catalytic Cracking on

Fuel Oil Supply." Authors: Arthur E. Pew, Jr., vice president in charge of manufacturing; Dr. J. R. Bates, assistant to Mr. Pew; and Dr. J. B. Hill, manager of the development division of the manufacturing department of Sun Oil Co.

2. "Properties of Catalytic Fuel Oil Distillates and Their Combustion in Present and New Types of Burners." Author: W. A. Sullivan of the Shell Oil Co., Inc., New York City.

3. "The Program of the American Society for Testing Materials for the Improvement and Standardization of Fuel Oils." Author: Milton A. Powers, chief engineer of the Timken Silent Automatic division of the Timken-Detroit Axle Co.

The entire OHI engineering committee will act as the panel. Chairman Faust announced that he will accept questions from the audience and refer them to a properly qualified panel man for answer.

As evidence of the increasing interest and activity in the industry, Mr. Hess reported the following new members of OHI:

American Mohawk Corp., New York City; Applied Mechanics Co., Boston; Atlantic Steel Boiler Co., Philadelphia; Atlas Industries, Ltd., Montreal, Quebec, Canada; Automatic Devices Co., Chicago; Combustion Utilities Corp., New York City; Domestic Engineering Co., Chicago; Eckhart Mfg. Co., Roselle Park, N. J.; Guardian Utilities Co., Michigan City, Ind.

Herco Oil Burner Corp., Lancaster, Pa.; Iron Fireman Mfg. Co., Cleveland; Kresno-Stamm Mfg. Co. of America, New York City; Morse-Smith, Morse, Inc., Watertown, N. Y.; Plumbing and Heating Journal, New York City; Quiet Heat Mfg. Corp., Newark, N. J.; Sheet Metal Worker, New York City; and The Viking Mfg. Co., Cleveland.

An elaborate program of entertainment has been planned for the Oil Heating Institute banquet-dance on Thursday night, April 25, at the Ben Franklin hotel. Furnishing the music at this affair will be Mark Warnow and his Hit Parade orchestra, radio entertainer Harry Hershfield as master of ceremonies, and such stage and radio stars as Rose Marie, Johnny Thompson, the De Marco Sisters, and Jo-Ann Summer. Tickets for the banquet are \$8 each, and mail orders will be taken at the Institute headquarters at 30 Rockefeller Plaza, New York City, until April 18.



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New Passenger Ships To Get Air Cooling

NEW YORK CITY — Three new 18,000-ton Delta Line passenger liners under construction at Pascagoula, Miss., will be air conditioned by Carrier Corp.

Orders placed with Carrier call for equipment to cool all passenger state-rooms, public salons, officer's deck, promenade deck, hospital space, mess rooms, and crews quarters. The new vessels, slated for the New Orleans-Central America run, will operate almost entirely in tropic temperatures and the air conditioning is intended as a bid for postwar travel business.

The three new passenger ships will be completed this summer.

Other recent orders received by Carrier include air conditioning equipment for nine vessels of the Grace Line and two United States Maritime Commission ships under construction at the Bethlehem-Alameda Shipyard, Alameda, Calif.

Named Ilg District Chief

CINCINNATI — Bernie G. Silberstein, former manager of the Ilg Electric Ventilating Co.'s branch office here, has been appointed Ohio Valley district manager, announces P. D. Briggs, vice president and general sales manager.

In his new capacity Mr. Silberstein will supervise engineering and sales activities of Ilg branch offices in Columbus and Cincinnati in Ohio; Louisville and Knoxville in Kentucky; and Charleston, W. Va.

Freon Condensers • Dry-Ex Water Coolers
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vection Units • Oil Separators • Liquid
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CENTURY Type SCH Air Conditioning Motors

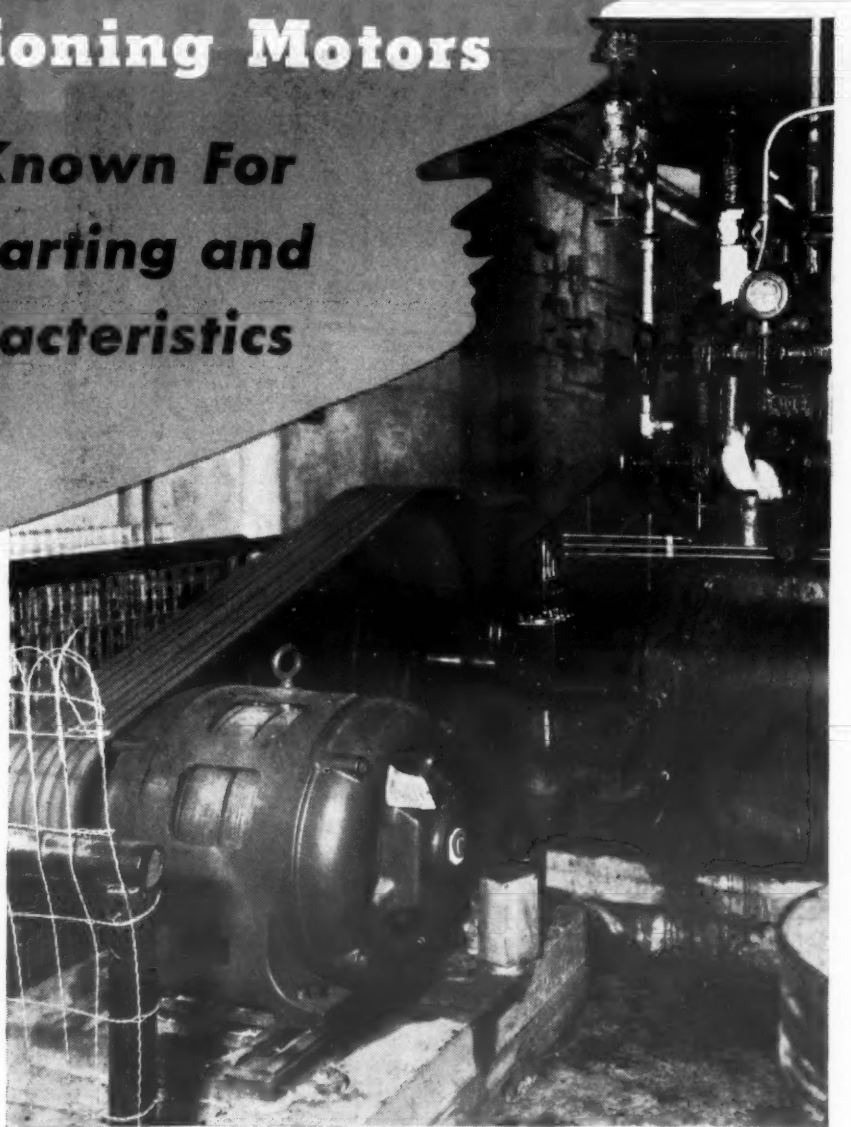
**Are Widely Known For
Their Quiet Starting and
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Century Type SCH squirrel cage, polyphase, high torque motors are the ideal power supply for refrigeration compressors because they have the ability to start heavy loads with low starting current.

In addition, Century motors are widely known for their ability to start and run smoothly and quietly, are unusually free from vibration, and are ruggedly built for long satisfactory service.

Many types of Century motors for refrigeration compressors, pumps, blowers, fans, unit heaters, and any other heating, cooling, or ventilating applications are made in a wide range of types and sizes from 1/20 to 600 horsepower, for single and polyphase alternating current and direct current.

When you are considering the specifications for — or the purchase of — electric motors, investigate the advantages offered by Century.



75 horsepower Century SCH motor driving a refrigeration compressor in an ice cream plant.



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Your Customers Do**

The appearance and construction of shelving can often prove a deciding factor in closing refrigerator sales in the dealer's store. Union Steel Products has had exceptional experience in producing shelves and baskets that are right... has cooperated with leading makers to produce designs that increase buy-appeal while lowering production costs. Quantity producers of refrigerators will find Union Steel Products experience and facilities the ideal solution to their shelving problems. Write today for complete information.

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Bendix Offers 104,301 New Common Stock Shares

SOUTH BEND, Ind.—In a move to increase its working capital for the purchase of inventories, Bendix Home Appliances, Inc., is offering 104,301 shares of common stock at 33½ cents a share to present holders of common shares, according to a registration statement filed with the Securities & Exchange Commission.

No public offering of the stock is planned. Stockholders of record March 30 may exchange 10 shares of their present holdings for one share of the new stock until May 15. They may also buy unsubscribed shares of new stock.

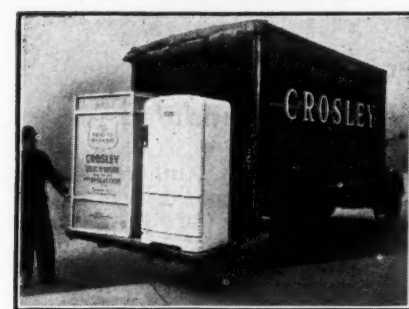
Bendix officials estimate that production and sales should hit about 50,000 automatic washers a month (\$4 million) once materials and supplies become available.

In its annual report Bendix announced a 1945 net profit of \$162,369, compared with \$243,060 in 1944. Net sales amounted to \$11,433,710 during 1945. Before Federal income taxes and renegotiation the 1945 profit totaled \$1,607,369. The company allowed \$1,445,000 for federal income and excess profits taxes, as well as renegotiation.

\$40,000 Building Planned

MINNEAPOLIS—Construction will begin here soon on a new \$40,000 two-story building to house Volkenant Appliance Co., electrical appliance dealer. The building, all concrete with a Kasota front, will be located at 1119 W. Broadway.

Delivery Truck Tailgate Dealer Uses 'Comparison Model' in Making Sales



CHICAGO—The Harry Alter Co., Crosley and Coleman distributor in Chicago, has equipped its new two-ton delivery trucks with the latest type of hydraulic lift tailgate.

No more will refrigerators, radios, or heaters and other heavy appliances be dropped from the tailgate, developing concealed damages. Also on pickups, such as home delivery from a dealer's store, a refrigerator, heater, range, or washer is lifted from the sidewalk to the truck, hydraulically, without danger of marring its finish.

Community Launderette Service Provided by 22 Coin-Operated Washers

PHILADELPHIA—Latest wrinkle in community service here has taken the form of a Launderette, where a battery of 22 coin-operated Bendix automatic washers make the task of getting the family laundry done merely another item on the homemaker's shopping list for the nominal fee of 25 cents.

After the clothes are placed in a Bendix, the patron can go on about her shopping duties for 30 minutes, return to the Launderette on her way home, and pick up her laundry damp dry ready for ironing.

Launderette is owned by Harry Feinstein and franchised by The Telecoin Corp. of New York City, who pioneered the Parkchester Launderette in the Bronx. It is claimed that during the past year, over 2,000,000 lbs. of clothes have been washed in the original and three additional Parkchester Launderettes in that city.

An Englishwoman, viewing the Launderette in operation, recalled the scarcity of soap, hot water, and laundry facilities in her country during the war, and said that the Launderette is the postwar improvement English women most need.

ST. JOSEPH, Mo.—As an aid in comparing features of various makes of refrigerators, Alberts Co., appliance dealership here, has standing on its sales floor a refrigerator model from a line which it does not handle—but all identifying marks have been removed from the unit.

"The box," says Sam Albert, president of the company, "is a sort of whipping boy. One of the first things Alberts' sales personnel learn is not to knock competition. But comparison is another matter. Comparison of this box with features of the company's regular line permits the salesman to make his point fairly—but fairly. To all Alberts' salesmen, all competitive lines are good—but his are best!"

Beaming a spotlight on shining new appliances is a method by which record-breaking crowds may be drawn to his store, find Mr. Alberts. When the end of the Japanese war was in sight, he secured a brand new refrigerator, floodlighted it on his sales floor, and nearly stopped traffic with the throngs that congregated in front of the store to view the eye-appealing spectacle.

Recently, the services of a home economist to preside over the store's model kitchen were obtained. She explains, in detail, the operation of new appliances; attends meetings of women's organizations; and offers practical cooking hints, home planning ideas, and food conservation measures.

'Utilities' Gas Engine Washers Get Prices

CHICAGO—Distributors have been ordered to determine their ceiling prices on sales to dealers of Electric Household Utilities Corp. washing machines equipped with gasoline engines by adding \$21.60 to the ceiling price determined for machines not having gas engines under Order 6, MPR 86, according to Amendment 3, recently issued by OPA.

Dealers' ceiling prices on washing machines equipped with "CC" type wringers are set by adding \$6 to the maximum price established in Order 6, MPR 86, for sales of washing machines equipped with standard wringers.

Also in Amendment 3, OPA established ceiling prices for two more models of washing machines manufactured by Electric Household Utilities Corp. The prices are:

Model No.	Zone 1 Each	Zone 2 Each	Zone 3 Each
T-81-CC-ER	\$89.95	\$ 94.95	\$ 99.95
T-82-CC-ER	99.95	104.95	109.95

Edison G-E Ironing Machine Ceilings Set

CHICAGO—Maximum retail ceiling price for Model LRI ironing machine manufactured by the Edison General Electric Appliance Co. here is \$32.55 in all the 48 states and Washington, D. C., states a recent OPA Order 50, MPR 86.

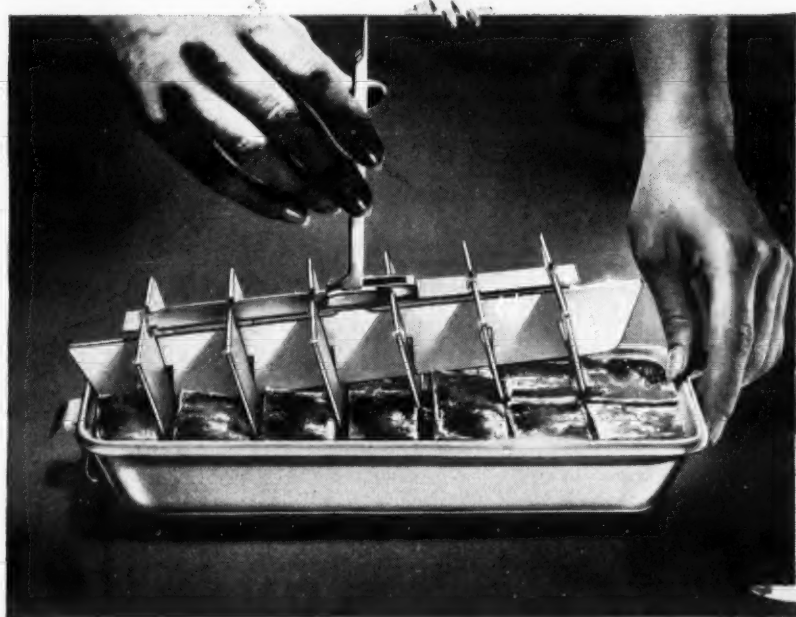
Edison General Electric has been ordered to determine its ceiling price on this model in accordance with the provisions of Sections 3 and 5 of MPR No. 86, except that an increase

of 56 cents is allowed, said OPA.

For sales by distributors to dealers, the ceiling prices are determined in accordance with the provisions of Section 15 of MPR 86, thereafter adding 56 cents.

This price is f.o.b. the seller's city, but when shipment is made directly from the factory to the dealer by special arrangement with the distributor, the above price is f.o.b. the dealer's city.

As Easy as it Looks!



Inland Shucker Ice Cube Tray

In a single action ice cubes are easily and speedily released from the Inland Magic Finish Shucker Ice Cube Tray.

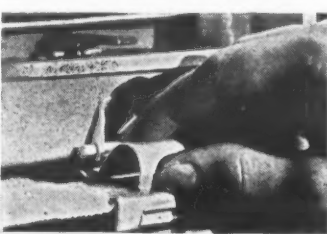
Result: maximum convenience in obtaining any number of full-sized ice cubes desired... from a tray the operation of which is utter simplicity itself. Furthermore, you get all the ice you freeze. Gone is the mess and bother of obtaining ice cubes by melting them

loose from an old-style pan. This ease in operation of the Inland Magic Finish Shucker Ice Cube Tray can be graphically demonstrated and sold.

Automatic refrigerator manufacturers deem it a "must" as original equipment—dealers seek it for replacement sales, while users revel in its convenience.

For details and prices write to INLAND MANUFACTURING DIVISION General Motors Corporation • Dayton, Ohio

IT'S EASY—for Ice Cubes in a Flash!



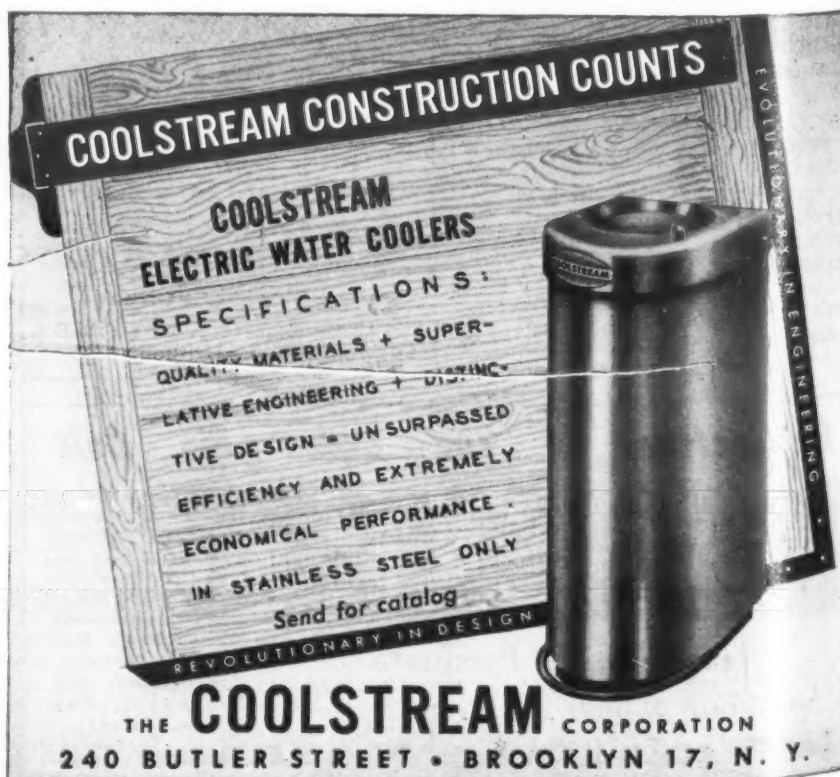
A slight forward pull of the fingers on the pan lifter instantly and easily loosens the Inland Shucker Tray from the ice box sleeve.



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QUICK RELEASING**

ICE TRAYS BY INLAND

INLAND



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Gov't Claims on Activated Carbon Draw Blast from Key Air Conditioning Firm

Use of Adsorbing Agent in System Would Reduce Operating Cost Very Little, Says Manufacturer

Refuting a War Assets Corp. claim to the contrary, a "leading manufacturer" of air conditioning equipment, who prefers to remain anonymous, asserted that the use of activated carbon would appreciably reduce neither the initial nor the operating costs of present-day conventional air conditioning systems.

In a detailed statement to the NEWS the "manufacturer" blasted a statement issued earlier by the WAC which maintained that costs could be sliced as much as 80% through the use of Army-developed activated carbon.

WAC RELEASE PRINTED

(The NEWS printed in the March 11 issue the text of a release by the WAC in which the properties and potentialities of activated carbon were discussed by WAC "technicians." They pointed out that the activated carbon, developed by the Army Chemical Warfare Service, is a powdered mixture of bituminous coal and 8% copper that has a markedly large capacity for absorbing gases and fumes. This ability to absorb gases so freely, said WAC, would enable activated carbon to be used in air conditioning units, thereby making it possible for units to use and re-use the same air and not have to cool outside warm air or heat outside cold air. The complete exclusion of outside air, the WAC statement said, would in turn reduce the amount of initial equipment necessary in air conditioning units to one-fifth of present size, and thus make air conditioning units of the future much more economical to manufacture, install, and operate.)

Although he agreed that there is a "definite place for activated carbon filtering in air conditioning, for gaseous odor removal, air purifying, and . . . to effect savings by fresh air reduction," the "manufacturer" in question was adamant in his contention that the War Assets Corp. erred in its estimation of costs, etc.

"... we do question and take issue," the source said, "with the general statement in this War Assets Corp. release that savings in first cost and operating cost and equipment size can unqualifiedly be effected by fresh air reduction to the extent of justifying the use indiscriminately of activated carbon filtering in air conditioning installations."

'EXAGGERATED' CLAIMS

WAC claims as to the economy possible with the use of activated carbon were termed "ridiculous and grossly exaggerated" by the "manufacturer," who said the figures introduced in the WAC statement might

possibly have been a "typographical error or a misquotation."

"To generalize," the manufacturer said, "there are obviously possible savings in installed refrigeration capacity, both in first cost as well as in operating cost, when cooling and heating by any means which will permit reduction of design quantity of fresh air introduced into a building through the air conditioning apparatus."

"However, the usual comfort air conditioning system uses about 30% of the installed refrigeration tonnage on a 95° F. dry bulb peak summer day for conditioning the fresh air introduced for ventilation purposes. Hence any savings can only come from this 30%. Thus if the fresh air is reduced 50%, the maximum installed capacity is only 15% less. However, the seasonal savings in operating cost would not be 15% in this example, since average outside air temperature through the summer cooling season is considerably less than the peak design."

"For example, there will be times when the outside dry and wet bulb temperatures are about the same as conditions being maintained inside, and the cooling equipment operates to absorb the internal heat loads from lights, people, etc. During such periods of operation, obviously, the savings in operating cost by fresh air reduction is practically zero."

OUTSIDE AIR SEEPS IN

"In many instances reduction of fresh air quantity below conventional design minimum requirements for good ventilation is not feasible since expected infiltration of outside air due to normal wind pressure is such as to equal or exceed minimum ventilation requirements, so that the fresh air load is present regardless of what is done to the calculated quantity introduced through the conditioning apparatus."

"Savings in fuel cost in winter heating by reduction of fresh air can be questionable in many applications. For example, department stores, variety stores, and the like, particularly in metropolitan areas, often have such heavy loads from lights and people that non-heated fresh air, in excess of minimum ventilation requirements, must be introduced to absorb the internal heat load for outside temperatures, in some cases as low as 30° F. Below 30° F. it is true the fresh air will have to be heated."

"However, degree hours below 30° F., during store hours of operation, are low in the usual continental northern U. S. climate, so that the savings in fuel cost by fresh air reduction may be either insignificant, or insufficient to compensate for the owning and operating (reactivation) cost of the activated carbon system."

SAME SIZE EQUIPMENT

"Finally, there is the 'increment factor' to consider. Fresh air reduction might in some instances be feasible to the extent that installed refrigeration plant capacity might be reduced 10%."

"A 100-ton refrigeration compressor reduced to 90 tons would probably require the same 100-hp. compressor motor since the next lower increment size, 75 hp., would obviously be too small for the requirements."

"The 90-ton installation would possibly require the same size compressor, condenser, cooling coils or water cooler, etc., in which case the ultimate first cost saving would be insignificant and possibly offset by the added first cost of the activated carbon installation."

In summing up his opinions of the WAC release of the potentialities of activated carbon in air conditioning, the "manufacturer" emphasized his conviction that the WAC claims were premature.

"The decision as to whether there is a justification for its use on this basis," he stated, "can only be made after a thorough engineering analysis and a careful weighing of all the facts and conditions affecting the design."

4 Branch Office Managers Appointed by Penn Electric Switch Co.



H. D. GRAY
Mgr., Milwaukee Office.



M. A. ANDERSON
Mgr., Seattle Office.



E. T. LAYPORT
Mgr., Berkeley Office.



W. H. KRACK
Mgr., Los Angeles Office.

GOSHEN, Ind. — New factory branch sales offices have been opened by Penn Electric Switch Co. in Los Angeles; Berkeley, Calif.; and Seattle, Wash., with William H. Krack, Edward T. Layport, and Meroy A. Anderson as managers, announces R. H. Luscombe, sales manager at the company's headquarters here.

Harold D. Gray has been appointed manager for the company's branch office in Milwaukee to succeed E. S. Kyle.

Mr. Krack, manager of the Los Angeles branch, recently returned

from overseas service. He was formerly associated with Detroit Lubricator Co. as a sales engineer in the company's New York office. An electrical engineering graduate of Purdue university, Mr. Krack has had extensive experience in the refrigeration field.

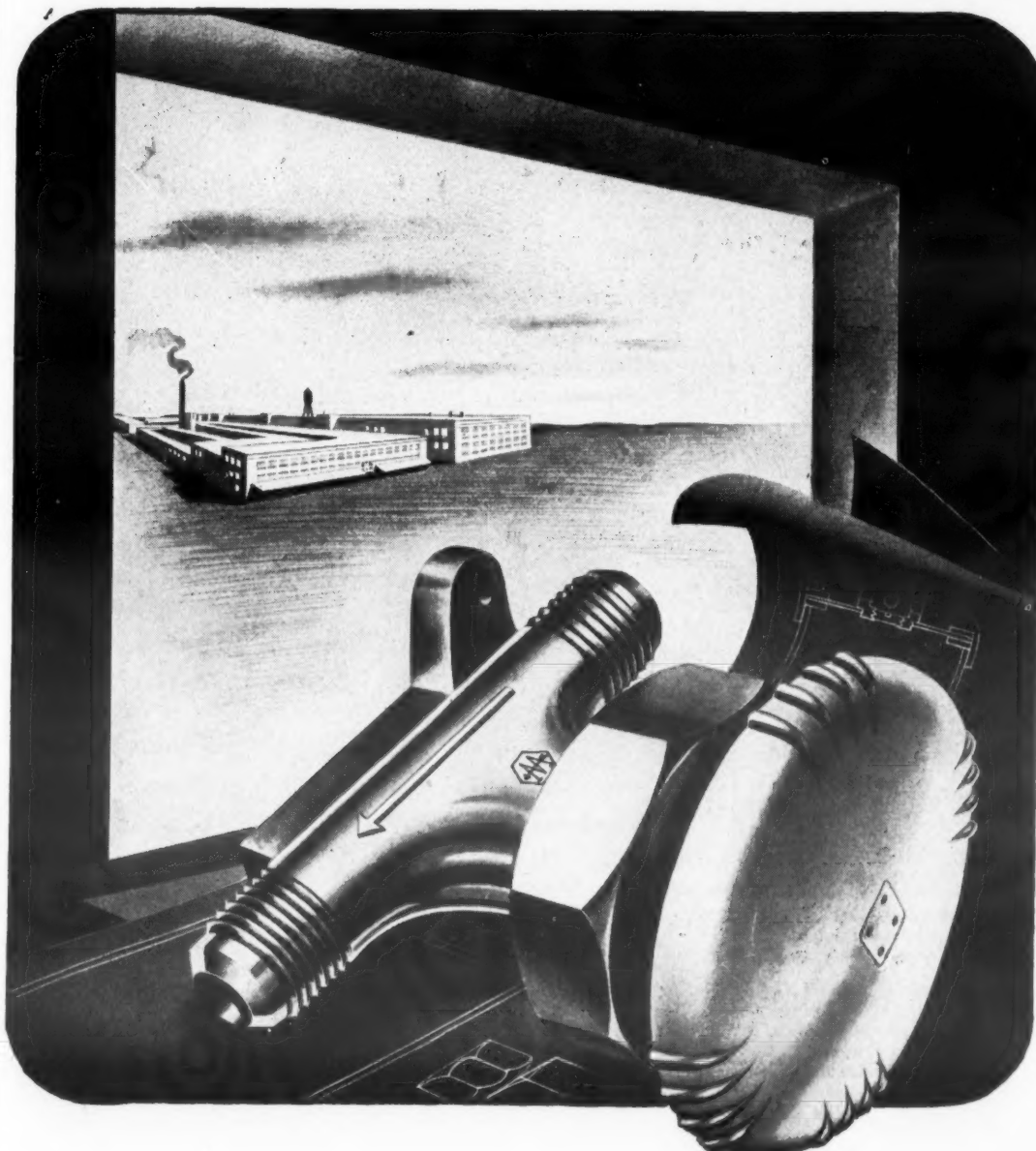
Mr. Layport, before becoming manager of Penn's Berkeley office, was an industrial engineer for Continental Can Co. in Chicago. He was previously employed as a sales engineer in the heating and refrigeration divisions of Frigidaire and Kelvina-

tor, respectively.

Mr. Anderson served in the Navy, before becoming manager of the Seattle branch. He joined the Penn organization as an engineer in 1933, and left in 1940, to accept a position in a government electronic laboratory in Washington.

Affiliated with the home office for many years, Mr. Gray is well versed in the application of Penn controls for heating, refrigeration, air conditioning, pumps, and air compressors, in addition to safety controls for internal combustion engines.

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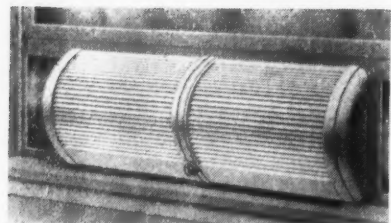
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What's New

Single Knob Controls Window Ventilator



NEW YORK CITY—A new type window power ventilator, said to feature control of four operational phases by a single "foolproof" knob, is now in production by United States Air Conditioning Corp., according to an announcement by J. J. Ferretti, New York manager.

The ventilator, developed for the corporation by Charles Davies, industrial designer, is scheduled for delivery in May, Mr. Ferretti said.

As the control knob is moved upward on the scale, the machine will in turn bring in fresh, filtered air, recirculate part of the room air and mix it with outside air, recirculate 100% room air, and exhaust room air, it is claimed. The knob also controls the switch and air volume.

Main advantage pictured for the machine is that the single control

eliminates any possibility of confusion as to operation. This feature is contrasted to prewar units "cluttered up with four or five knobs or levers . . . a cause of much confusion because it was difficult to remember which knob controlled a particular phase of operation . . ."

Direction of air flow is said to be controlled automatically by another feature of the ventilator, the curved front grill.

"When fresh air is being drawn in . . . the air is blown down towards the floor as well as straight across the room," Mr. Ferretti said. "When the unit is either recirculating part of the room air or all of it . . . the air is directed up towards the ceiling so as not to cause draughts. Any stage in between these two can be selected by adjusting the control knob."

Benefits of the new ventilator are listed as simplicity of operation, efficiency, and reduction of servicing to a minimum.

Taylor Ice Cream Units Redesigned for 1946

BELOIT, Wis.—Specifications on the 1946 Taylor ice cream freezer Model 640R have been announced by Tekni-Craft, manufacturer of freezers, ice cream cabinets, and other dairy equipment.



The horizontal type freezer, having a 6 quart capacity, is equipped with a Draw-Flex valve to aid in filling any size container. A Time-Temp Robot automatically controls refrigeration and whipping to keep freezer contents ready for serving. All parts of the freezer are solid nickel silver or stainless steel, the company says. The shell is hermetically sealed and insulated with cork.

The 1/2-hp. air-cooled "Freon" condensing unit includes a compressor controlled by a combination thermostat and low pressure switch or by "Speed Clox" for rapid hardening. The "Freon" unit has a capacity of 1,500-2,400 B.t.u. per hour at a suction temperature of -20° F. and a head temperature of 100° F.

The cabinet has heavy baked enamel sides, a stainless steel cover, and is insulated with cork. A freezing capacity space of 20 gal. is provided, an equal dispensing capacity and a mixing space capacity of 9 gal.

The beater, equipped with two "whirl" rolls and six detachable scraper blades, is driven by a 1/4 hp., 110 volt, 60 cycle, single phase motor.

Over-all dimensions on the 858 lb. model 640R freezer are as follows: The cabinet is 51 1/2 in. high, 54 1/16 in. wide, and 39 in. deep. The ice-cream compartment is divided into two sections, each 26 in. by 10 7/16 in. by 22 3/4 in. The bottom half of each section is for hardening, the top half for dispensing. Mixing space is 21 1/4 in. by 18 1/2 in. by 8 1/4 in.

American Central Adds Automatic Dishwasher

CONNERSVILLE, Ind.—Claiming complete washing, rinsing, and hot air drying cycles, American Central Mfg. Corp. here has designed a new automatic electric dishwasher equipped with a top spray, a food trap with a self-cleaning screen to prevent food particles from being re-circulated, and a one piece plastic impeller which circulates water at the rate of 50 gallons per minute.

Production is scheduled to start late this year, according to Charles A. Reinbolt, Jr., advertising and sales promotion manager.

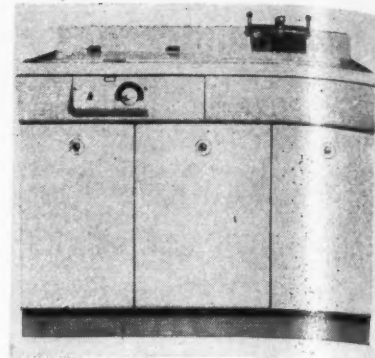
American's dishwasher has been installed in the left side of a 48 in. cabinet sink unit similar in design and appearance to the 48 in. sink and laundry tray design, but it will also be available, the company stated, in a free-standing 24 in. base cabinet for installation anywhere in the kitchen.

With a capacity of 60 pieces of china and glassware, plus silverware, the dishwasher will wash a service for eight people in one operation using a total of three gallons of 140° to 160° water, the company claims.

Manual operation involved consists of merely placing the dishes on the tray, placing the detergent in a container which automatically discharges it into the washing cycle at the proper time, closing the cover, and flipping the switch, it is reported. The automatic operating cycle is performed by the electric control, as follows:

From the top of the back wall a preliminary spray lasting 30 seconds gradually brings the dishes and glassware up to temperature to prevent breakage, and carries away any food particles that might have been left on the dishes.

The washing cycle is of five minutes' duration, during which the control automatically closes the drain, measures one gallon of hot



water, and dumps the detergent, it is claimed.

At the close of the washing cycle, the control opens the drain, completely emptying the machine before another gallon of hot water is measured for the one minute preliminary rinse, this being followed by another complete emptying of the machine and a second one minute rinse.

Heated dry air is circulated through the dishwasher for 15 minutes upon completion of the rinsing process, the company reports, thereby drying the dishes preparatory to immediate removal, if desired.

Dishwasher is designed so that water will drain from the cover back into the sink bowl, preventing any accumulation of food soil at the cover opening. Included in the self-closing drain is a check valve arrangement which prevents back-ups from the drain line. The motor is permanently lubricated for long operating life, says the company.

G-E Develops Small Refrigerator Lamp

CLEVELAND—A 40-watt lamp, specially designed for use in mechanical refrigerators, has been announced by the Lamp Department of General Electric Co., at Nela Park, here.

The new lamp, considerably smaller in size than the G-E 40-watt general service lamp, offers two distinct advantages when used in mechanical refrigerators, according to Nela Park engineers. Its small size saves refrigerator space and reduces the cost of the lamp shield. The new G-E lamp also produces more light than bulbs of comparable size and lower wattage. It gives approximately the same light as the general service 40-watt lamp.

The new lamp is inside frosted, has a medium screw base, is designed for 120 volts, and has a rated life of 1,000 hours under specified test conditions. List price is 11 cents, plus tax.

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THIS CASE UNFAIR TO FOG!

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Heat Interchanger Improves Operation In Many Ways; Don't Use It To Cut the Size

TORONTO, Canada—"Use the heat interchanger to improve the overall operation of a refrigeration system, but don't use it as a way of cutting the size of the machine that is needed on the job," declared Paul Domke, head of the Mueller Brass Co.'s refrigeration sales division, in speaking before the recent convention of the Interprovincial Association of R.S.E.S. here.

"If you try to sneak by with a smaller machine because the heat interchanger improves the efficiency of the whole system, you're cutting the capacity of the installation, and it may fail to function properly when the peak loads are encountered."

Mr. Domke, whose experience in the refrigeration industry dates back

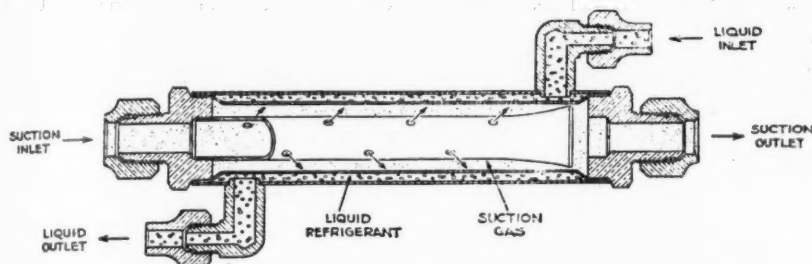
special refrigeration system accessory in which the refrigerant in the liquid and suction lines, running counter-flow to each other, enables the suction line gas to "dry out" so that no liquid goes back to the compressor, and reduces the heat of the liquid refrigerant which is on the way to the evaporator.

This resulted in the following advantages in the operation of a refrigeration system:

Made it possible to utilize all of the coil, eliminating the need for a "dryer coil" type of arrangement that cut down the full use of a coil.

Eliminates liquid slugging back to the compressor, and resulting increased wear and chance for breakdown of the compressor. This is

How a Refrigeration Heat Interchanger Functions



to the days when ammonia was the only refrigerant used in commercial refrigeration work, told how experience has taught refrigeration contractors and service engineers the value of heat interchangers.

"In those days," he related, "we would spot solder the liquid line to the suction line to cut down the slugging of liquid refrigerant back to the compressor."

"This helped to prolong the life of the machine, and it reduced the number of service calls, an important factor in those days when one service organization often covered all of the territory within a radius of a couple of hundred miles or more."

"But even this first crude interchanger did more than that—it made the system work better and reduced operating costs."

Out of these crude beginnings came the development of the present-day heat interchanger, a

particularly important in low temperature systems.

Reduced the amount of refrigeration needed to do a particular job, by providing a cooled liquid refrigerant going to the coil.

A combination of these factors often serves to cut power costs 8 to 10%.

Eliminated the need for covering the suction line.

Placement of the heater interchanger is important, Mr. Domke said. Generally recommended is that it be placed just beyond the refrigerant control element (which is usually the thermal valve bulb) in the suction line.

What size of heat interchanger should be selected for a particular job? Best thing to do, Mr. Domke recommended, is to stick to the heat interchanger that is rated for the capacity that the particular system will produce.

Washington, D.C. Firm Plans To Wholesale Supplies

WASHINGTON, D. C.—Entry into the field of wholesale refrigeration parts supplies is announced by the Electric Equipment Co., manufacturers' agent and distributor for several refrigeration firms. Alterations and new construction now under way will ultimately give the company over 10,000 ft. of space for a store display room, a stockroom, and repair shop, reports Lee Harris of the firm.

Intending to provide prompt repair work and parts supplies for service men, the company already

has in operation a conveyor belt system for the most efficient handling of motors.

The firm provides official sales and service for Delco, Wagner, and Emerson motors, and reportedly has one of the largest motor repair shops in the east. In the refrigeration field, Electric Equipment Co. is distributor for Penn Electric Switch Co., General Controls, Tecumseh Products, Goodyear V-Belts, Virginia Smelting Co., Jas. P. Marsh Corp., Texaco Lubricants, Bonney Tools.

Dealer Builds \$250,000 Food Bank, Sales Store

TULARE, Calif.—A \$250,000 building program consisting of four new structures, one to house the new headquarters of Fish's refrigerator sales office and warehouse, has been started by Robert Fish on his property located just inside the city.

One of the other buildings under construction, the remodeled "Food Bank," which was destroyed by fire last fall, will be used for frozen food lockers, a bakery and candy kitchen, grocery, fruit, and meat departments, said Stanley Smith, operator of the burned plant and of a similar plant in Delano.

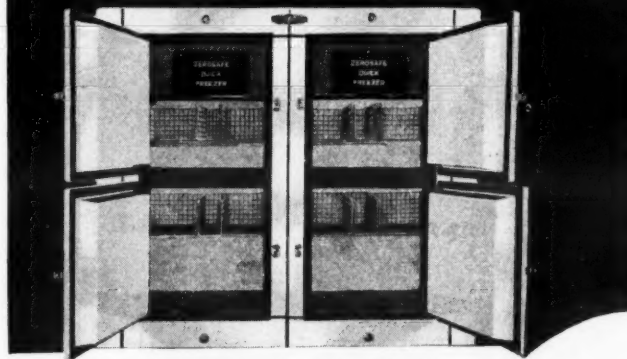
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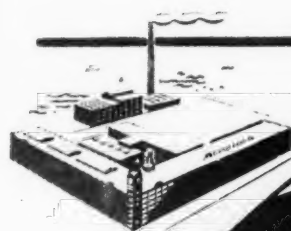
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'Dryseal' Threads Planned For Weatherhead Fittings

CLEVELAND — All Weatherhead Ermeto, inverted, S.A.E., and compression tube fittings using a pipe thread on some portion of the fittings will henceforth be supplied with Dryseal pipe threads, according to George H. Hufferd, vice president in charge of engineering at the Weatherhead Co. here.

"Dryseal pipe threads are conceded to be better both from the standpoint of seal and strength, and are used for refrigeration systems, as well as fuel and oil systems, where trouble-free assembly and pressure-tight joints are desired," Mr. Hufferd said.

Weatherhead's decision to equip all fittings requiring pipe thread with the Dryseal type is an attempt "to conform to the adoption of dryseal pipe threads by the automotive industry as standard on tube fittings," continued Mr. Hufferd.

Complete details of Weatherhead's recently set up standards and their applications are covered in the booklet, "What Dryseal Pipe Threads Are and How They Work," which is available upon request from the Weatherhead Co., 300 E. 131st St. here.

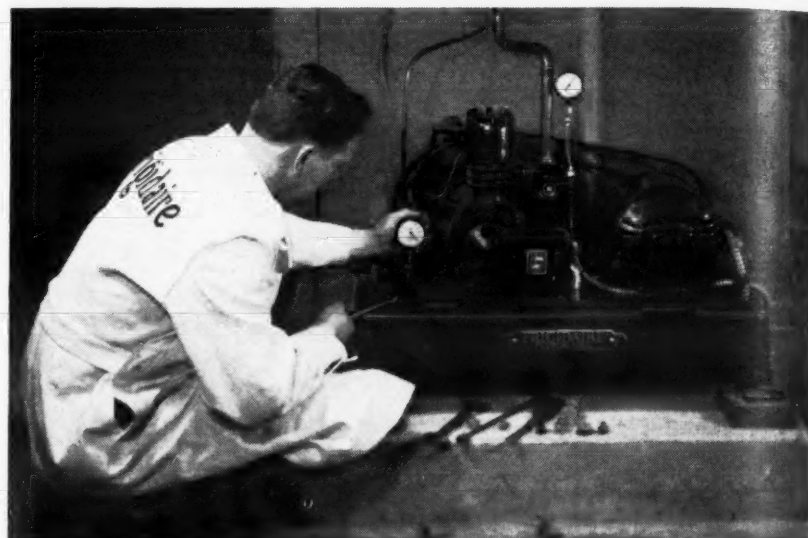
Firm to Offer Stock

LOS ANGELES — Registration statement for 102,150 shares of new \$5 par common stock has been filed with the Securities Exchange Commission by the Mission Appliance Corp., manufacturer of gas-fired water heaters here. Of this amount, 30,850 shares will be offered to the public for \$8.25 per share.

Servicing Commercial Refrigeration Systems

Instalment No. 4

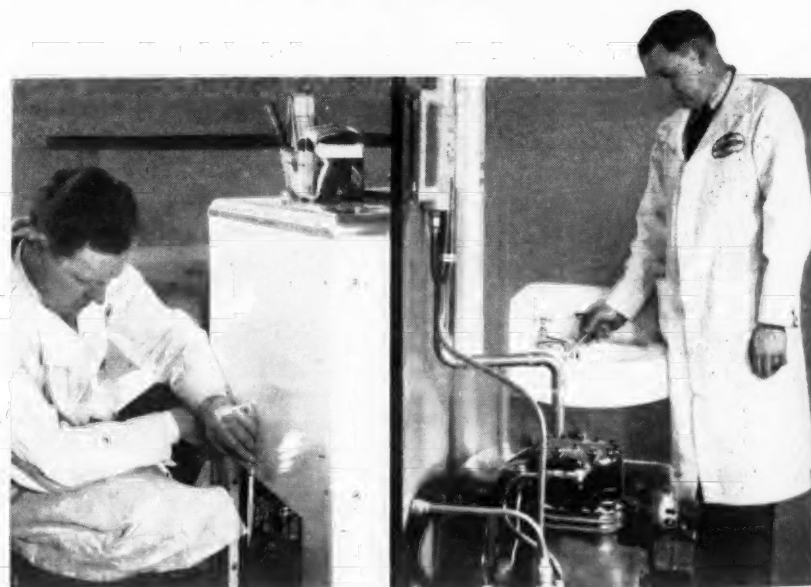
9—(Step 4) Install the Pressure Gauge And Check Idle and Operating Head Pressures



Idle head pressure gives an indication of whether there is air in the system. Operating head pressure determines the capacity of the compressor.

Head pressure cannot be estimated or guessed at. It depends upon the temperature of the condensing medium, the pulley size, and the suction pressure. It has already been obtained by using the vacuum gauge.

10—(Step 5) Check the Temperature of The Condensing Medium



Always check the temperature of the air or water passing over or through the condenser. Never assume that the air in the room or the water from some faraway faucet is at the same temperature as that passing through the condenser. However, with a water-cooled condensing unit, it is often possible to find a nearby faucet that is on the same water line.

11—(Step 6) Check Pulley Size and Condensing Unit Model



Frigidaire condensing units have three different pulley sizes, based on the capacity needed. Before checking always be sure to stop the condensing unit by opening the electric switch. Now that the service man knows the model of the condensing

(Continued on next page)

IT'S THE INSIDE OF THIS TUBE THAT COUNTS MOST



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high-grade as it looks. This tube is dead soft for easiest working. It comes in sizes from $\frac{1}{8}$ " to $\frac{3}{4}$ " O.D. with .035" wall.

Revere Dryseal Copper Tube is sold by Revere Distributors in all parts of the country. The Revere Technical Advisory Service is always ready to help with your difficult problems.

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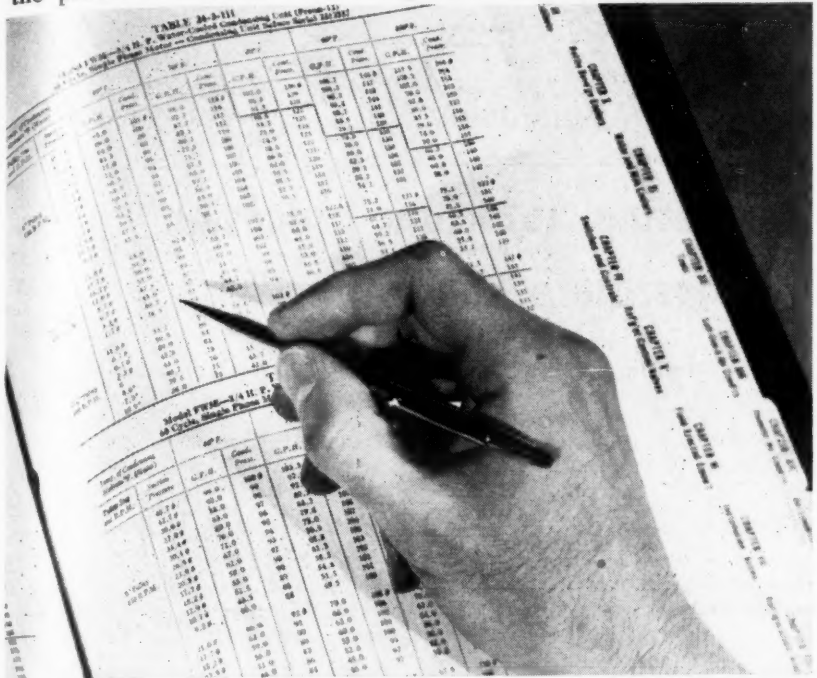
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to Exploring the Unknown on the Mutual Network every Sunday evening, 9 to 9:30 p.m., EST:

Servicing Commercial Systems (Cont.)

unit, the pulley size, the temperature of the condensing medium, and the suction pressure, he can refer to one of the charts in Chapter III, Section 3 of the Service Manual and learn whether the pressure is correct for the particular model. (See below.)

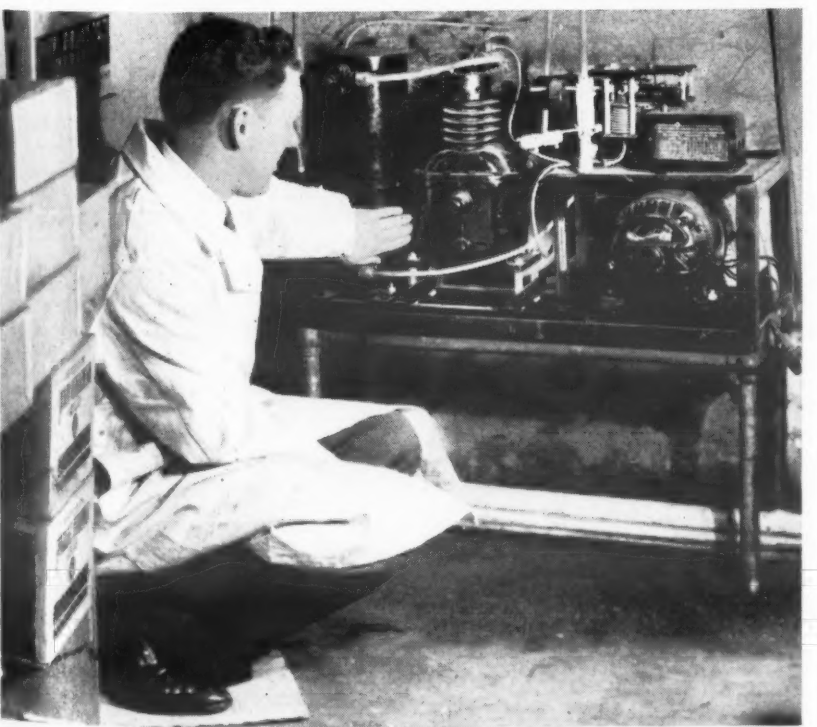


12—(Step 7) Check Refrigerant Supply



A system short of refrigerant cannot produce the refrigeration it is capable of producing. On the other hand, it is sometimes harmful and always wasteful to have too much.

On certain models the supply can be checked with the liquid level indicator. On others, shut off the air or water supply while the condensing unit is running, and feel for that portion of the receiver which remains cooler than the top.



More important than ever in the war on moisture



IMPERIAL TORPEDO DEHYDRATOR
One piece streamlined shell—fewer joints—no soft solder—less chance of leakage. Copper and brass construction. Packed with "Silica Gel". Built in sizes up to 7 h.p.
IMPERIAL BRASS MFG. CO., 565 S. RACINE AVE., CHICAGO 7, ILL.

New Solder Filled With 3 Cores of Rosin Flux

BROOKLYN—Alpha Metals, Inc. has developed Tri-Core, a new solder with three independently filled cores of pure rosin flux. The new product offers faster soldering, elimination of dry joints, and substantial savings in tin, according to the company.

Tri-Core is more efficient and less wasteful than the usual single core solder, as a continuous supply of rosin flux is always present, and the occurrence of "dry" sections in more than one core at a given point is mathematically unlikely, it is claimed.

Permitting more joints per pound of solder, Tri-Core has careful cross-sectional proportioning, according to the manufacturer.

Plate Systems Described In New Kold-Hold Catalog

LANSING, Mich.—A new catalog, combining refrigeration data with descriptions and specifications of its plate and "hold-over" type evaporators, has been prepared by Kold-Hold Mfg. Co. here.

Containing charts showing how to compute both high and low temperature plate requirements, the catalog also lists the specific and latent heats of the various perishable products. It features complete instructions for determining the dimensions and heat leakage for truck plates.

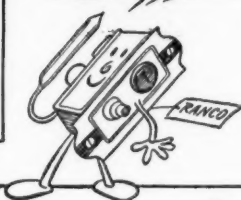
Serpentine plates for locker plant space cooling, for shelves and dividers, for shelves and stands in sharp-freezing are described.



He says he'll get tough if we don't keep him fresh with a BUSH COOLER.

1. GOOD MARGIN OF PROFIT.
2. QUICK, EASY INSTALLATION.
3. ALL TYPES FOR GENERAL AND EXACT REPLACEMENT.

MR. DEALER, HERE'S HOW YOU AND I CAN MAKE MORE MONEY FOR YOU — BY WORKING TOGETHER



Ranco Inc.
COLUMBUS 1, OHIO

It's just simple Logic...

You want your replacement work to be satisfactory to build consumer good-will; to keep present equipment operating until new units are available; to actually earn and deserve a fair margin of profit. When you install a Ranco Replacement Control you and your customer confidently expect precision, dependability and accuracy.

Your Ranco Jobber carries a more complete line of controls now than during the war; we are striving to increase this supply; but we ask that you accept your Jobber's recommendations when certain instruments are temporarily unavailable.

REFRIGERATION SERVICE MEN ACKNOWLEDGE THE OUTSTANDING QUALITIES OF

HUSSMANN
REFRIGERATION!



Over 39 years of experience in solving every sort of Refrigeration problem—plus modern manufacturing facilities devoted exclusively to Refrigeration—plus a competent Service Organization over the entire country—all add up to the kind of Refrigeration that experts respect.

* the men who **Know**—know **HUSSMANN**—know it well and know it favorably.

HUSSMANN

REFRIGERATION, INC.
HUSSMANN BUILDING • ST. LOUIS 6, MO.



A B.T.U. BOOSTER



CAPACITOR

A TMECO PRODUCT

Here is an ideal application for all Air-Cooled Freon and Methyl Condensing Units. Gives new life and added capacity on "borderline" installations.

Automatic water regulating valve attached to CAPACITOR admits minimum amount of water only during period head pressures get beyond normal operation.

A TMECO CAPACITOR installation makes condensing unit an air and water-cooled combination, especially practical where temperatures vary during year if increased capacity is desired.

3 Models with H.P. Ratings from 1/4 to 2.

Jobbers Wanted

Immediate Delivery From Stock



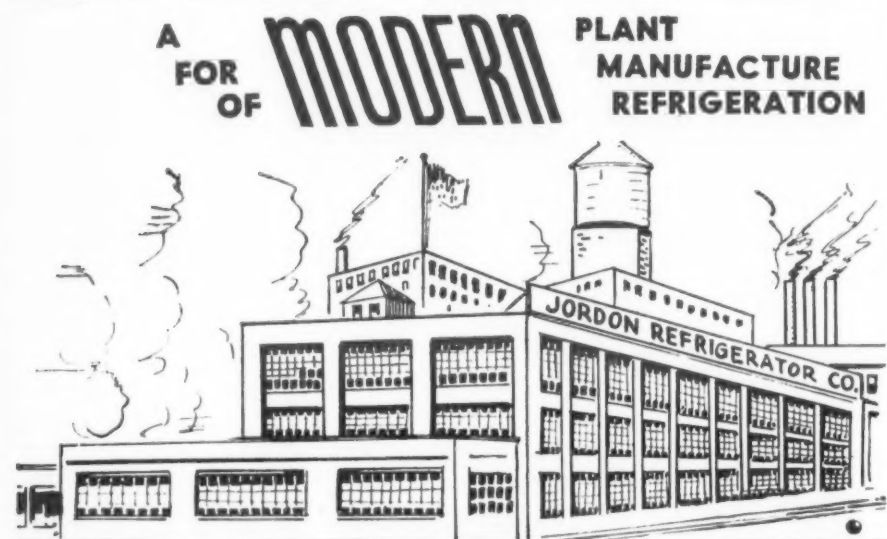
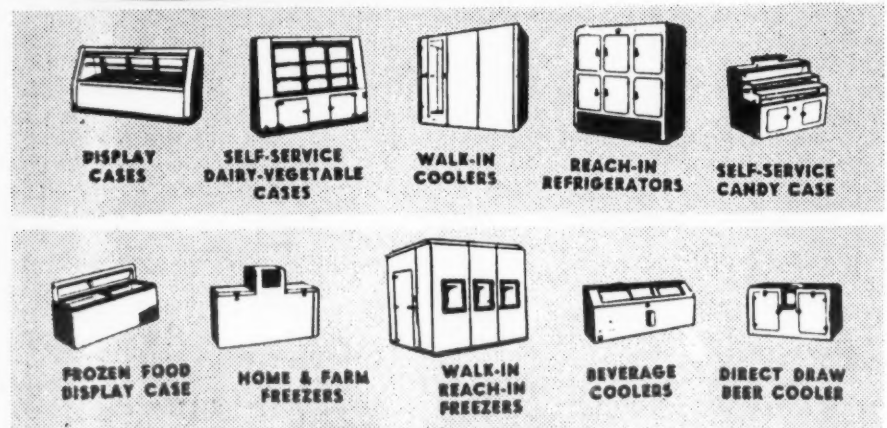
TUCSON MACHINE & ENGINEERING COMPANY - Tucson, Arizona

JORDON

AMERICA'S BEST COMMERCIAL LINE!

Refrigerators

BEST IN OPERATION • BEST IN VALUE • BEST FOR YOU



JORDON'S PHILA. PLANT

Revolutionary improvements are made possible at Jordon's streamlined plant. Advanced engineering and craftsmanship in every branch of Jordon's modern plant operation, will bring to the trade the finest complete line of commercial refrigeration equipment.

INQUIRE NOW FOR COMPLETE DETAILS ON AMERICA'S FINEST COMPLETE LINE OF COMMERCIAL REFRIGERATION EQUIPMENT

JORDON REFRIGERATOR COMPANY
SALES DIVISION
235 No. BROAD ST., PHILA. 7, PA.
Phone RIttenhouse 6359
FACTORY—PHILADELPHIA, PA

Refrigeration Problems And Their Solution

By P. B. Reed

For Service and Installation Engineers



Manager, Refrigeration and Air Conditioning Division, Perfex Corp.

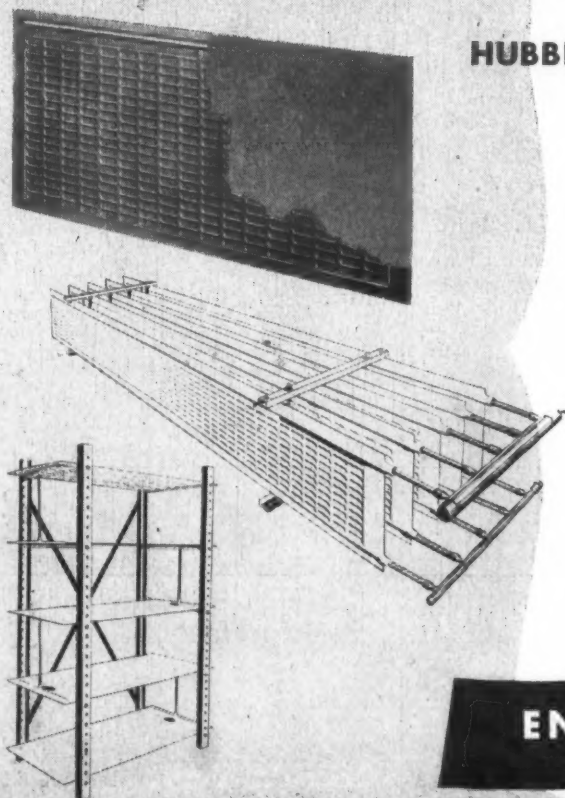
Service Chart for System Using Automatic Expansion Valve With Temperature Control

Symptoms	Possible Causes	Remedy
CONDENSING UNIT WILL NOT RUN. <i>Evaporator frosted, Suction line warm. Suction and discharge pressures normal. Refrigerator warm.</i>	Air circulation in refrigerator blocked. Fans (if any) stopped. Temperature control not set cold enough. Excessive heat leakage perhaps at door gasket. Evaporator too small.	Remove paper from shelves or rearrange food to allow good air circulation. Start fans. Repair electric circuit if necessary. Set control colder and reset expansion valve to maintain a correspondingly lower pressure. Trace source of excessive heat leakage and make repair. Set temperature control colder and expansion valve to lower pressure; or preferably replace evaporator with a larger one.
<i>Evaporator defrosted or defrosting. Suction line warm. Suction pressure high. Discharge pressure normal.</i>	Power off; line trouble. Main or branch circuit fuses blown, due to ground, overload, short-circuit, stuck compressor or motor, belt too tight, fuses loose in clips, fuses too small. Loose or broken wire in main or branch circuit, in control circuit or in motor. Temperature control contacts burned and not making contact. Charge lost from power element of control. Belt broken, motor running but compressor idle. Space around refrigerator too cold; not enough heat into cabinet to require condensing unit operation.	Notify power company. Find cause of fuses blowing, and make necessary repair. Install correct size fuses. Find open circuit and make repair. Replace contacts in control or replace entire control. Replace belt and then check tension. Refrigerator and condensing unit should not be placed where the ambient temperature is below 50°.
<i>Suction line cool. Suction pressure high. Discharge pressure low.</i>	Condensing unit in a colder place than the temperature inside the refrigerator.	Use "cross-ambient" type of temperature control, having large feeler bulb.
EVAPORATOR POSSIBLY ALL FROSTED BUT NOT COLD ENOUGH. <i>Suction line cool to cold. Suction pressure normal to high; discharge pressure high</i>	Condensing unit overloaded. Condensing unit too small, belt slipping, low voltage. Air cooled condenser dirty or bad air circulation. Water cooled condenser: water warm or restricted. Air in System.	Reduce load or use larger condensing unit. Increase capacity or replace condensing unit. Clean condenser or get good air circulation. Get sufficient supply of cool water to condenser. Purge air out.
EVAPORATOR FROSTED AND COLD. AIR IN REFRIGERATOR TOO COLD. <i>Suction line cool to cold. Suction pressure normal. Discharge pressure normal too low.</i>	Temperature control sticking in close position; contacts welded together. Temperature control set too low. Short circuit in line to temperature control.	Replace contacts or entire control. Readjust the control. Find short circuit and correct it.

(This service chart will be continued in next week's issue of the News)

NEVER MIND HOW GOOD YOU USED TO BE—HOW GOOD ARE YOU NOW?

HUBBELL-YODER full flooded plate refrigeration meets the challenge of this atomic age



FROM a purely technical angle, it's the fastest temperature pull-down you ever saw.

More specifically, it's the system of mechanical refrigeration which circulates the refrigerant through a network of ducts criss-cross each other in all directions thus literally "flooding" the length and width of the interior of the plate with a web of refrigerating element. Every square inch of the entire area of a Hubbell-Yoder Full Flooded Plate is prime pick-up surface.

This is refrigeration performance geared to the stepped up standards of this new era. There is no point in comparing its efficiency with prewar refrigeration practice because there just isn't any comparison. Low temperature equipment such as freezer cabinets, locker plant plate banks, sharp freeze shelf stacks, fruit and vegetable counters, etc., whose refrigeration units bear the Hubbell-Yoder trade mark is simply in a class by itself. If you make, sell or use such products it will pay you to get the clear facts about these sensational plates. Write, wire or phone.



International Sales Agents
ENGINEERING SERVICE INC.

1309 West 80th Street

Cleveland 2, Ohio

THE COLD CANVASS

Jottings from Notebooks of the Staff

What Kind of Stores Sell the Refrigerators?

In what proportion or percentage of total volume do various types of retail business establishments sell household electric refrigerators?

That's been the subject of many a study and many a survey, a good many of which have been pretty much a guess. We recently saw some data on this subject compiled for the year 1941 by one of the leading manufacturers, and for the larger population centers it looked like this:

Type Outlets	Population	
	Over 100,000-500,000	Over 500,000
Exclusive Appliance Dealers	30.3	23.9
Furniture Stores	27.3	20.9
Department Stores	24.3	30.2
Hardware Stores	3.3	3.6
Music and Radio Stores	8.6	6.8
Auto Dealers	0.0	4.2
Other Stores	6.2	10.4

Meet the Little Lady



Betty, the girl you'll be seeing in the Peerless advertisements, met some of the industry in person during the recent R.E.M.A.-R.E.W.A. conventions. With her here is Paul Hopper of the Keifaber Co., Dayton.

By this time many members of the industry who didn't attend the recent R.E.M.A.-R.E.W.A. convention in Chicago must have heard from those who did attend about "Miss Peerless," the little-lady in the page-boy uniform who will soon make her bow in the Peerless of America advertisements, and who made a personal appearance at the convention.

"Betty," as she became known to those who met her through Mel Knight's good hospitality, was as nice as she is pretty (we offer a picture to prove the latter point).

More About the Round House With the Ovolving Shelves

In case you want some more information about the Fuller house (the circumferential dwelling, suspended from a mast, which is described on pages 10 and 11 of this issue) here are some additional items:

Interior partitions, having no load-bearing functions, can be utilized to provide storage and utility space. It seems apparent from the plans that some of the kitchen appliances are to be built into two of these partitions.

Some shelf and storage space is provided by "ovolving shelves" located within the partitions of entrance hall and both bedrooms ("ovolving" is a term coined by Mr. Fuller, a term-coiner of no mean talents, to denote vertical as opposed to horizontal motion). The shelves are a system of motor-driven aluminum storage containers, which move slowly past an opening on the flip of a switch.

Lighting fixtures are grouped around the top of the central utilities column, light being diffused along the curved surfaces of the ceiling.

You can have any color of lighting you want too, so that a turn of a control knob will suit your mood—a warm rose color for bleak days, say, or a cool green for summer.

You can paint the house or not, as you wish. You can clean the exterior by washing it with a hose.

In case you worry about such things, the Fuller house is designed to withstand indicated velocities of 180 miles per hour. This was the velocity of Okinawa's typhoon and is claimed to be much more than a conventional house can withstand.

Snow and rain are carried off by the curved roof—through gutters inside the roof. Sound complicated? It is.

Wouldn't that big ventilator be awful noisy? Nope, say the Fuller people, it turns silently, and doesn't rotate continuously—only when the wind changes.

Will the house be noisy when wind and hail beat on the aluminum roof? Shucks no, say the Fuller people, "rain on the roof," they aver, "will become a cozy, hushed sound." Furthermore, there are no beams to creak or shutters to slam and scare the daylight out of you when you have settled down with your favorite mystery story!

And finally, what if you want to hang a picture on the wall? A-ha, they've thought of everything, for on both the plywood panels or the metal surfaces, nearly invisible open-end rivets provide holes for picture hangers.

Is the Industry Maturing?

A piece of publicity wafted into the office the other day which constitutes what we think is a most unusual piece of news—in fact, it might even be a "first."

It's about a man who is going to retire from the refrigeration industry.

Now we've heard of many a man quitting, being fired from, or dying with his boots on in the refrigeration business, but doggone if we can ever remember anyone who was going to retire from it.

The man who is retiring is Herbert H. Bosworth, who has had charge of the sale of all General Electric Co. Appliance & Merchandise Department products to utilities in the West.

He's a man who certainly has a right to retire. With General Electric for 46 years, he was a pioneer in the electric refrigeration field, in 1925 selling at retail the first G-E refrigerator built commercially for the domestic market. In 1927, when the G-E Refrigeration Department was organized, Mr. Bosworth was named manager of central station sales. He probably has a wider acquaintance among utility merchandising men than any other single individual in the country.

Another pioneer who is being given recognition for his continuing activity in the field is C. R. Brogan, Atlanta zone manager for Kelvinator, who has been cited by the company on completion of his twentieth year for the firm, having started in the service department in Detroit in 1926. He has been in the Atlanta territory since 1934, and zone manager since 1939.

He 'Cracked' More Than Just a Sale

The most recent in the pictorial series on celebrated crime cases taken from the files of the FBI, which have been appearing in our Sunday newspaper, tells the story of a Bellaire, Ohio, electric refrigerator salesman, who "under this cloak of respectability, became a master safecracker."

"In his 'Dr. Jekyll' role," the story related, "he was a scrupulously honest businessman and sold so many refrigerators to Bellaire housewives that he won a trip to Cuba."

We've been trying to draw some sort of a moral from this tale, but it's been pretty tough to do. Maybe it's to the effect that there's no cloak of respectability quite like that of being a successful refrigerator salesman.



"No Broken Promises— No Bad Friends"

SAYS THE LEHIGH TEAM

It was a great show in Chicago and we hope we made a lot of friends. We are reasonably certain that the quality of "M&E" LEHIGH Condensing Units was impressive. But the thing that worries us is that we still have to say "Not yet!" to so many very fine buyers who need equipment now. • It is still our policy not to take an order we can't deliver when promised—and not to make a promise that we can't fulfill to the letter.

M&E
EST. 1866

1/3 and 1/2 H. P. HEAVY DUTY CONDENSING UNITS

—in new, space saving proportions that greatly widen the range of usefulness for compressors of this rating—and materially lessen inventory requirements. Manufactured, in volume, in one of the largest and most modern plants in America, and to a standard of performance and precision unexcelled in the industry.

LEHIGH FOUNDRIES, Inc.

Plant: Lancaster, Pa.

LEHIGH "M & E"
1/3 H. P.
HEAVY DUTY

YOU BENEFIT FOUR WAYS When Selecting Wagner Repulsion-Start Induction Motors

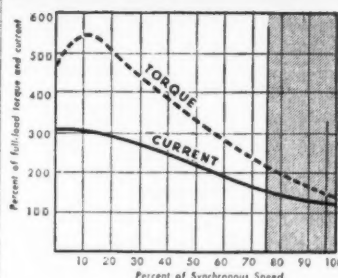


Figure 1

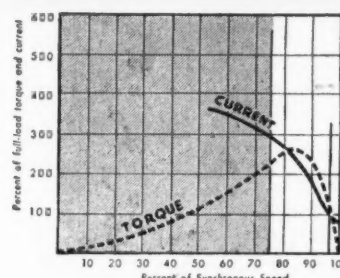


Figure 2

As these graphs show, Wagner repulsion-start induction motors combine the most desirable operating characteristics of the repulsion motor and the induction motor. Figure 1 shows the speed-torque-current characteristics of a repulsion motor while Figure 2 is for an induction motor. Note that when the unshaded portions of these two graphs are combined, the most desirable characteristics of both are retained in the new graph, Figure 3, which shows the performance curves of a Wagner repulsion-start induction motor.

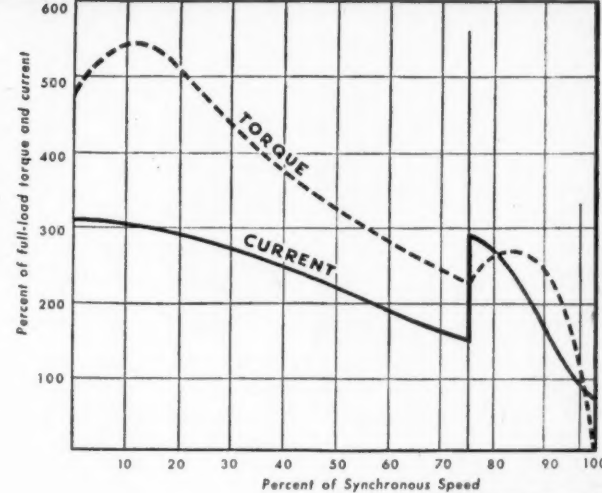


Figure 3

These benefits to you, as a user of Wagner repulsion-start induction motors, result from this happy combination of the best features of two types of motors:

Desirable Features of Repulsion Motors

1. High starting-torque enables them to start high-inertia loads and accelerate them smoothly.
2. Lowest starting-current of any type of single-phase motor, therefore least likely to cause light flicker.

plus

Desirable Features of Induction Motors

3. Fairly constant and high operating speed at all operating loads.
4. Fairly flat efficiency curve over wide operating range.

Wagner type RA motors are truly "general-application" motors. They are particularly suitable for driving machines with high-inertia, machines involving excessive friction in starting, and, in general, loads requiring motors capable of exerting high starting-torque with relatively low starting-current.

Wagner type RA motors embody the latest improvements in single-phase motor design. This means that the user of RA

motors gets the best motors for the job with long life and dependability built into every part.

For a complete description of Wagner Repulsion-Start Induction Motors, as well as all other types of Wagner single-phase, polyphase, and direct-current motors, ask for Bulletin MU-185. Address your request to Wagner Electric Corporation, 6441 Plymouth Ave., St. Louis 14, Mo.

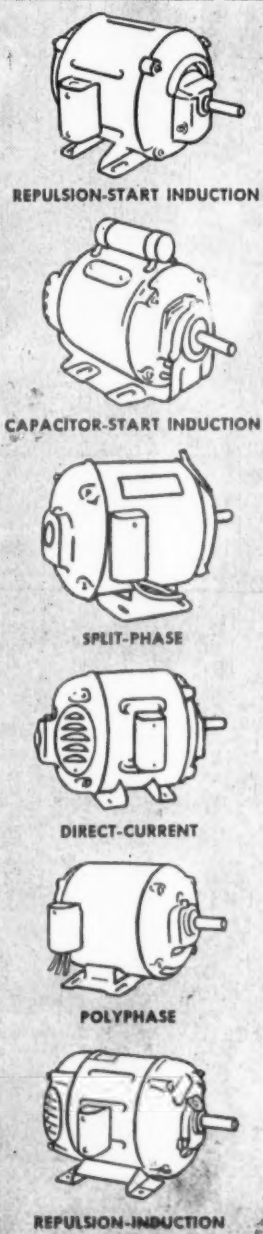
Other WAGNER PRODUCTS for Industry: • AIR BRAKES • BRAKE LINING • ELECTRIC MOTORS • HYDRAULIC BRAKES • INDUSTRIAL BRAKES • INDUSTRIAL BRAKE CONTROLS • No. 1 • TACHOGRAPH • TRANSFORMERS

Consult Wagner Engineers on all Electric Motor Problems

Wagner

Sales and Service Branches: ATLANTA 3 • BALTIMORE 18 • BOSTON 15 • BUFFALO 8 • CHICAGO 16 • CINCINNATI 10 • CLEVELAND 15 • DALLAS 1 • DENVER 2 • DETROIT 2 • HOUSTON 2 • INDIANAPOLIS 4 • KANSAS CITY 8 • LOS ANGELES 15 • MEMPHIS 3 • MILWAUKEE 2 • MINNEAPOLIS 4 • NEW YORK 7 • OMAHA 2 • PHILADELPHIA 8 • PITTSBURGH 13 • PORTLAND 9 • ST. LOUIS 3 • SALT LAKE CITY 1 • SAN FRANCISCO 3 • SEATTLE 4 • SYRACUSE 2 • TULSA 3 • WASHINGTON 5
In Canada: WAGNER ELECTRIC AT LEASIDE, ONTARIO

Wagner motor parts are available at 350 Wagner-owned and contract repair shops.



Servicing Frozen Food Equipment, Packaged Units Presents New Problems for Repairmen

TORONTO, Ontario — Present trends in the refrigeration industry, particularly the growth of frozen foods, will have a pronounced effect on the refrigeration service man, declared C. E. Graff of Ranco, Inc., in a general talk before the recent annual conference of the Interprovincial Refrigeration Service Engineers Society here.

"There will be both good and bad frozen food cabinets on the market, and the bad ones are going to give the service man trouble," he warned. "And so the service man had better prepare himself for this business."

"Then, too, as many people start to freeze foods at home, they'll have lots of questions, and who can answer these questions about freezing except the service man."

"Unscrupulous merchants will also be selling frozen foods which have melted and then been refrozen," commented Mr. Graff. "The customer who eats these foods will probably be unhappy and may blame the home refrigerator. It will be up to the service man to point out that the foods were injured before they were taken home. There may also be the problem of over-age frozen foods,

which won't taste so good."

Service men will have to increase their knowledge of truck refrigeration units as frozen foods become more popular, said Mr. Graff, for these trucks will have to be repaired on the spot if they break down to avoid losses in the frozen food loads.

He called the attention of the service man to the refrigerated trucks now being produced which incorporate a reverse cycle heating operation in the refrigeration unit. The R.S.E.S., he declared, should help spread the knowledge of servicing these units.

Commenting on general trends in design, Mr. Graff pointed out that the trend to non-repairable products which have to be replaced rather than repaired in the field appears to be continuing.

"There is a definite trend to balanced packaged units which will correct troubles at the factory which heretofore have been corrected in the field. Service men can't change these units. They'll be limited to bringing these units up to their peak operating efficiency."

An educational job of large proportions has to be done in the refrigera-

tion field, declared Mr. Graff, who called upon experienced service men to help train newcomers to the field.

"The old timers who teach newcomers tricks of the trade will help the whole refrigeration industry," he said.

These veteran service men will also have to help the industry by correcting in the field faults of the products that are sure to occur in the next few months, according to Mr. Graff, who told service men that it will probably take six months before factories can train their help to produce items as good as the prewar output.

Another problem facing service men will result from the increasing use of capillary tubes which, Mr. Graff declared, aren't generally very well understood in the industry.

"In recent months control manufacturers in the United States have been attempting through the underwriters to change electric motor rating methods to eliminate the term horsepower," Mr. Graff also told the service men.

"One motor which may be rated $\frac{1}{4}$ hp. actually draws $\frac{1}{4}$ hp. current, but another motor labeled as $\frac{1}{4}$ hp. may, for competitive purposes, actually be a $\frac{1}{2}$ -hp. motor. If the service man protects the latter motor with $\frac{1}{4}$ -hp electrical equipment, it may not be able to carry the load."

"When the change is finally made, both motors and controls will be rated in amperes and we'll forget about horsepower," said Mr. Graff.

Henry Offers Schools Free Industrial Wall Charts

CHICAGO—Henry Valve Co. here has announced the publication of educational wall charts now available without cost to colleges, trade schools, and manufacturers' service schools.

These charts feature large, clear cross-section views of typical accessories used in refrigeration and air conditioning; the text is factual and informative; the charts contain no advertising.

They are available to firms and institutions requesting them on their own letterheads.

Temple Plans Full-Time Refrigeration Courses

PHILADELPHIA — In addition to evening courses in refrigeration and heating, ventilating, and air conditioning, the Temple university technical school here plans to inaugurate full time day courses, probably of one or two years' duration, starting about June 3 of this year, announced James J. Crawford, director.

Tentative plans for the day courses include the teaching of chemistry, physics, mathematics for estimating, drawing, and probably a course in bookkeeping or accounting, in addition to either principles of refrigeration or of heating, ventilating, and air conditioning, Mr. Crawford said.

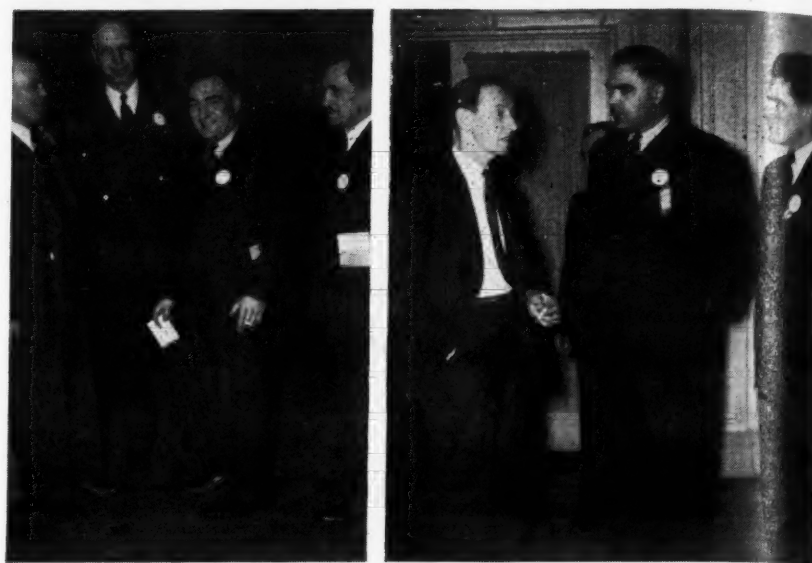
All technical courses of the school, he explained are designed to give basic training to men desiring to enter either of these fields as well as to upgrade those persons now employed in the industry. Many veterans have enrolled in Temple university courses under the G. I. Bill of Rights. Exact starting dates, of course, are set when sufficient applications are received.

The one-year evening course in refrigeration was started Oct. 1, 1945, and consists of practical and theoretical training, according to Mr. Crawford. Meetings are held two nights a week, three hours a night, for two 15-week periods. Instructors for the two semesters are George P. Ward of the Philadelphia Appliance Service Corp. and Forrest E. Cory of the Judson C. Burns Co. here.

A heating, ventilating, and air conditioning night course has been taught for 20 years under the direction of men from the industry.

Catalogs, mimeographed material, and additional information concerning the courses are available upon request.

In the Corridors at Annual Canadian Meeting



The informal "hallway sessions" were much in evidence during the recent Interprovincial Refrigeration Service Engineers Society convention in Toronto, Canada. In the picture on the left (in the usual l. to r. order) are Ed Spall, Perfex Controls, Ltd., Toronto; J. D. Ross, Railway & Engineering Specialties, Ltd., Montreal; James Spence, Hamilton, Ontario, contractor; and Paul B. Reed of the Perfex Corp. In the picture at the right H. F. (Bert) Nye, Superior Refrigeration, Ltd., talks things over with K. F. Heddon and H. S. Ostrander of the Sun Oil Co.

Two Named To Research Foundation Council

BERKELEY, Calif. — Two new members were recently added to The Refrigeration Research Foundation's scientific advisory council, the Foundation reports.

They are James M. Lemon, chief of the technological section of the Division of Commercial Fisheries,

U. S. Department of Interior, and Prof. Burgess H. Jennings, chairman of the department of mechanical engineering at Northwestern university.

The Foundation at the same time reports the resignation of Dr. Harden F. Taylor.







PANEL TYPE
UNIT
COOLER

PATENT APPLIED FOR



●With the THERMOBANK a zero degree system is just as automatic as a 40 degree system — in fact more so.

It never needs to be defrosted because it defrosts itself automatically without the use of brine sprays, water sprays or electric heaters.

Write for Bulletin TV345 N



COOLMASTER



RADIAL
UNIT COOLER



AIR COOLED
CONDENSER

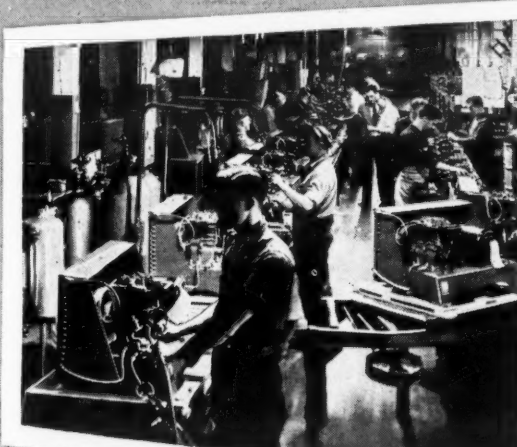


FLOOR
TYPE
UNIT
COOLER

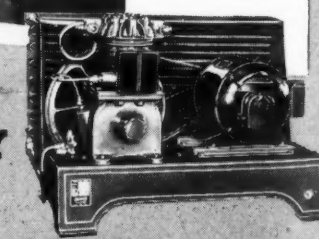
KRAMER-TRENTON CO. Trenton, N. J.

Catalog R 142 N Sent on Request

BRUNNER REFRIGERATION HELPS YOU SERVE BETTER



BRUNNER has not sacrificed QUALITY for Volume!



It is not difficult for us to remember that the scars of war are still with us. Certain necessary materials and equipment are still on the "scarce" list. Volume at Brunner plants is restricted to the number of units that can be manufactured to the fixed high standards that have enabled Brunner Units to establish the records of long service life, dependability and operating economy for which they are noted. From the smallest nut or bolt to the larger size castings there will be no "skimping" in manufacturing time or material quality. By severe shop and service tests, every part built into a Brunner Condensing Unit must prove that it will uphold the Brunner reputation.

Brunner machinery, tools and methods are designed for precision manufacture... operated by skilled, experienced men who pride themselves on their workmanship.

The name "Brunner" on a refrigeration condensing unit signifies that here is a fine piece of equipment... a credit to the judgment of the purchaser in

having made the most of his refrigeration equipment investment dollars.

However refrigeration is used in your business it will pay you to study the Brunner Catalog which describes and illustrates the Brunner line of water cooled condensing units ranging from $\frac{1}{3}$ to 25 hp... air cooled from $\frac{1}{4}$ to 3 hp. Write for it today.



For more than 40 years the Symbol of Quality

BRUNNER MANUFACTURING CO.
UTICA 1, NEW YORK, U. S. A.

W.H. Lehr Becomes General Sales Manager at Gilmer

PHILADELPHIA—W. H. Lehr has taken over the duties of general sales manager of L. H. Gilmer Co. here, manufacturer of Gilmer V-belts, succeeding M. R. Oberholzer. Mr. Oberholzer (as reported previously in the NEWS) has formed a company in Philadelphia to distribute industrial equipment.

Mr. Lehr has been active in the Gilmer domestic and export sales department for 28 years.

Retailers to Absorb Most Of Stove Price Factor

WASHINGTON, D. C.—The 5% reconversion increase factor to be applied to manufacturers' existing ceiling prices for domestic cooking and heating stoves (except electric models) will be absorbed 25% by wholesalers and 75% by retailers.

Manufacturers are required to list separately on the invoice sent each customer the dollar-and-cents amount of the increase, so that wholesalers and retailers can compute the amount of the price increase that they are required to absorb. Wholesalers also are required to list separately on their invoices the amount of the increase based on the wholesaler's adjusted charges.

Electric ranges were not included in the price increase, since the increase was granted on the basis of an industry-wide survey, and the Electric Range Industry Advisory Committee asked to have the survey of their section of the industry postponed.

Wholesalers Protest Price Boost Absorption

WASHINGTON, D. C.—A protest against absorption of the 20% increase recently granted manufacturers of radio tubes for replacement purposes was made to the OPA last week by representatives of the National Electrical Wholesalers Association and the National Electronic Distributors Association.

These groups declared that they could not handle the added burden, and OPA asked for further figures to review the subject. It is said that OPA promised to issue an interim order splitting the absorption of the increase on an 80-20 basis so that tubes could keep moving through trade channels until a final decision was made. This decision is expected in approximately 30 days, according to reports.

OPA Corrects Wholesale Price for Hotpoint

CHICAGO—Erroneous wholesale ceiling prices announced by OPA in Order 10, MPR 598, for three models of Hotpoint refrigerators manufactured by Edison General Electric Appliance Co., Inc., were recently corrected by the agency.

Models affected are EA7-1, EB7-1, and EC7-0.

Correct ceilings for these models are contained in the following list of national maximum prices announced by Edison G-E for its complete line of 1946 refrigerators. Including the Federal excise tax, the current prices are:

Model	Dis-tributors	Serv-icing Dealers	Non-Serv-icing Dealers	Con-sumers
EA6-0, 6 cu. ft.	\$ 82.66	\$ 98.95	\$106.35	\$133.75
EA7-0, 7 cu. ft.	94.32	112.48	119.88	151.50
EA7-1, 7 cu. ft.	101.00	120.65	128.05	165.50
EB7-1, 7 cu. ft.	111.13	132.42	139.82	188.25
EC7-0, 7 cu. ft.	120.50	143.74	151.14	209.50
Additional for left-hand door	2.75	3.25	3.25	4.75

Retail prices include delivery, a one-year warranty, and a four-year replacement contract, the company said. These prices are f.o.b. the distributor's city, except that when shipment is made directly from the factory to the dealer, they are f.o.b. the dealer's city.

Distributor prices, it was stated, are based on carload lots and an additional charge of 3% of the carload price on less-than-carload lots or truck shipments will be made. These ceilings are f.o.b. the factory, with freight prepaid and allowed to the distributor's city, but it was pointed out that when consolidated carload shipments are made to more than one destination, any stop-off or switching charge made will be borne by distributors.

F. M. Slasor, manager of the refrigerator sales division, said allocations were being worked out for distributors and that information on deliveries would be forthcoming soon. Difficulties in resuming production after the extended work stoppage were blamed for the delay in this data.

OPA also announced corrections of wholesale ceilings as originally announced in Order 11 for three models of General Electric Co.'s refrigerators. Correct prices for these models, LBX7B, BH7A, and B7C, are the same as Hotpoint models EA7-1, EB7-1, and EC7-0.

Tests for 4% Boost on Machinery Set Up by OPA

WASHINGTON, D. C.—The increase of 4% in manufacturers' prices of machines, parts, and industrial equipment covered by Revised Maximum Price Regulation 136 will be subject to tests which must show that the cost of steel for the line of products is normally in excess of 40% of the average selling prices for the line.

(Some refrigeration products have been under Regulation 136.)

The following are the tests to be applied:

Test 1. Use the latest available Profit and Loss Statement to cover at least a three months period for the division of the business producing the line of products. Determine the cost of steel covered by Amendment 15 to Revised Price Schedule No. 6 included in the cost of "direct material" and divide this figure by net sales. If the resulting percentage exceeds 40%, this test is met.

Test 2. Select the most representative item of the product line for which cost data is available (if accurate unit cost data is not available, this test may not be used), determine the cost of steel covered by Revised Price Schedule No. 6 included in the cost of "direct material" and divide the figure by the average net realized price of the item. If the resulting percentage exceeds 40%, this test is met.

Dealers will not be forced to absorb this increase. The order states that "maximum prices for sales by resellers of the products shall be the maximum prices in effect just prior to the issuance of this order increased by the same percentage by which their net increased cost has been increased."

New M&E WALL AND CEILING DIFFUSERS

UNIFORM CABINET COOLING through MODULATED AIR FLOW

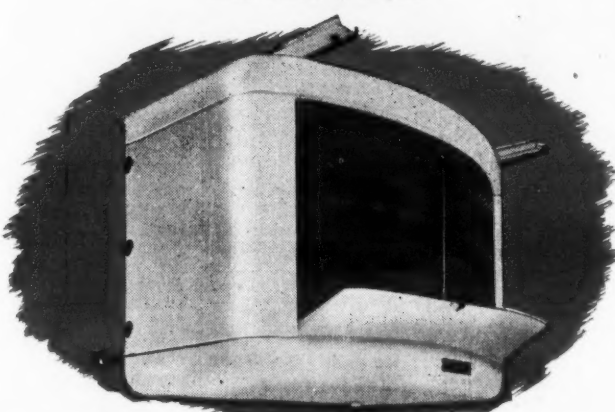
- Eliminates "dead-air" pockets.
- Avoids excessive dehydration, sliming, condensation, water-drip, wet floors.
- Maintains high relative humidity.
- Small and compact in size.
- For replacement—and for use in modern design cabinets.



• FOR MEATS PROVISIONS AND ALL ABOVE-ZERO APPLICATIONS •



ABOVE: Ceiling Model 12CD and 34CD
BELOW: Wall Model 12WD and 34WD
Data Sheets on Request



Manufactured and Distributed by
MERCHANT & EVANS CO.
Plant & General Offices: 2035 WASHINGTON AVENUE, PHILA. 46, PA.

PIONEER MANUFACTURERS OF HEAT TRANSFER EQUIPMENT

BEHIND THE SCENE . . .

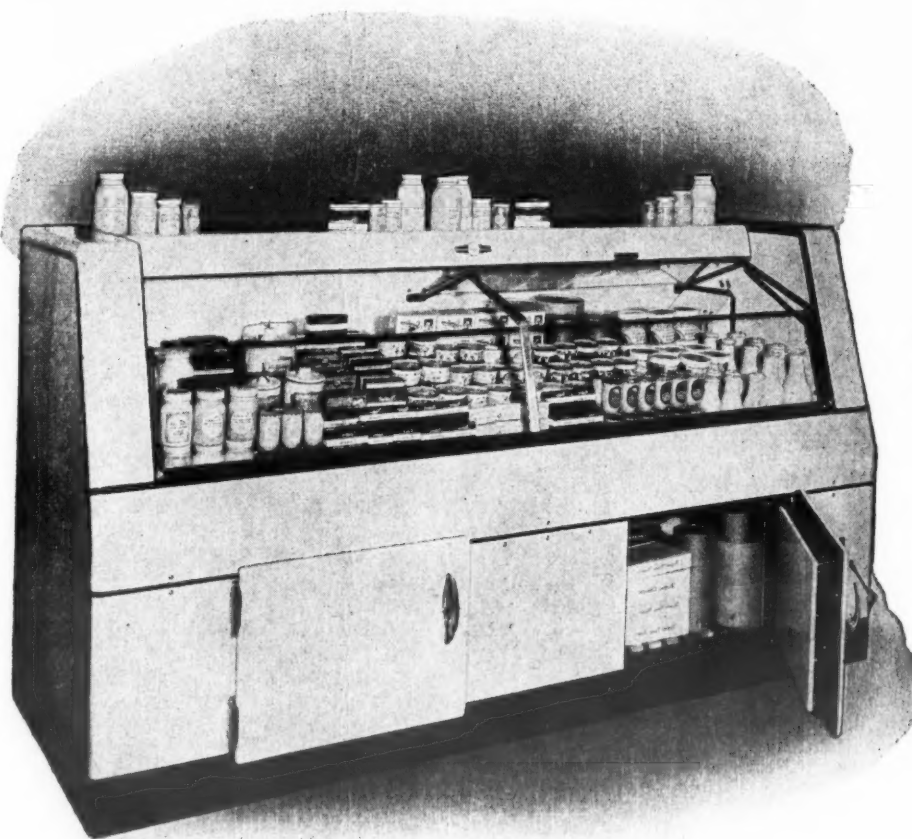
there's

a

Torrington

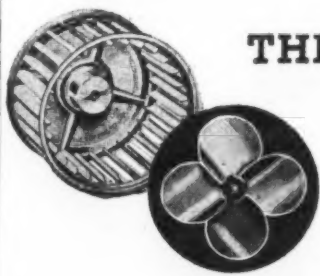
Air

Impeller



REFRIGERATOR manufacturers have found that the heat transfer of refrigeration coils can be increased tremendously by forcing air circulation around them with a fan (or blower wheel). In one case, using a Torrington air impeller in this way quadrupled efficiency. Torrington air impellers are also used in large display refrigerators to circulate the air inside the storage space so that temperature and humidity remain constant.

This is only one example of the ways in which manufacturers in widely diversified fields are using forced air circulation to increase the efficiency and convenience of their products. Have you thought about air in relation to your product? Torrington's research facilities and extensive experience are at your service on any problems or questions you may have. Simply write us at 16 Franklin Street; a copy of our Air Impeller Specification Sheet will be sent you without charge or obligation.



THE **TORRINGTON**
MANUFACTURING COMPANY, TORRINGTON, CONN.

Air Impellers for Every Purpose

TRUCK

Order Monday—Get It Friday;
Rubber Tired

NOW! "Handy Andy" all purpose tube steel 600 lb. cap. Full size first quality. Not a wartime makeshift. Light wt. very easy to handle. Ht. 44". 14" wide at nose. Curved cross pieces. Nationally known. Thousands in use. Fully guaranteed. Send back express collect, if not best truck buy you've seen in years. Clip this.

The HANDEES CO., Dept. 10C3 Bloomington, IL

REFRIGERATION

and AIR CONDITIONING GUIDE

JUST OUT! 4 Books in One!

Covering:
Basic Principles, Servicing, Operation, Repair of
1. Household Refrigeration
2. Special Refrigeration Units
3. Commercial and Industrial Refrigeration
4. Air Conditioning Systems
A gold mine of essential important facts for ENGINEERS, USERS AND SERVICEMEN.
Here you have at your fingers' ends a Complete Library in ONE VOLUME, the necessary data you have been looking for on: MODERN UNITS, SYSTEMS AND MACHINERY, REFRIGERANTS, REFRIGERATION.

ANSWERS YOUR QUESTIONS.

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MAIL AUDEL'S NEW REFRIGERATION GUIDE for free examination. If O.K. I will send you \$1 in 7 days then remit \$1 monthly until price of \$4 is paid. Otherwise I will return it.

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Address _____

Occupation _____

Employed by _____

Commercial REFRIGERATION

MODERN

- DISPLAY CASES
- COOLERS
- REFRIGERATORS
- HOME FREEZERS

AMANA SOCIETY
AMANA, IOWA

SPECIFY...

DRYERS THAT BEAR THIS LABEL

CHARGED IN DAVIDSON'S SILICA GEL

WITH

—the label that is your guarantee of maximum performance and satisfaction. Your jobber stocks it—for refilling and in factory charged dryers.

NIAGARA

AERO-PASS* CONDENSER

with the NIAGARA "OIL-OUT"

increases refrigeration plant capacity; saves power and water.

Patented features: "duo-pass" coil keeps condenser tubes free from scale; "oil-out" constantly cleans oil and dirt from the refrigerant.

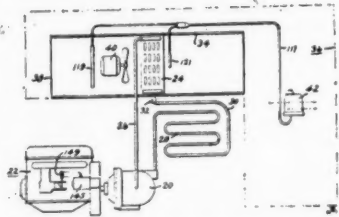
NIAGARA BLOWER COMPANY
30 Years of Service in Air Engineering
6 E. 45th St., New York 17, N. Y.

*Trade-mark registered

PATENTS

Week of March 12

2,396,234. REFRIGERATING APPARATUS. George C. Pearce and Albert O. Grooms, Dayton, Ohio, assignors to General Motors Corp., Dayton, Ohio, a corporation of Delaware. Application May 31, 1941, Serial No. 395,934. 7 Claims. (Cl. 62-4.)

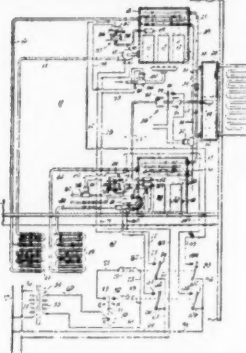


3. Refrigerating apparatus including a cooling unit, supply means for supplying a cooling medium to the cooling unit, cyclical control means having an inherent differential for cyclically controlling said supply means, means for circulating a medium to be cooled in heat exchange relation with the cooling unit, a fluid motor for operating the cyclical control means, a main bulb means responsive primarily to the medium flowing to the cooling unit, a compensating bulb means responsive primarily to the medium flowing away from the cooling unit for reducing the inherent differential of the cyclical control means, means connecting said bulb means with said motor, and means within the bulb means, connecting means and said motor for creating pressures therein substantially in accordance with the volume and temperature of the bulb means.

2,396,338. RADIATION HEATING AND COOLING SYSTEM. Alvin B. Newton, Minneapolis, Minn., assignor to Minneapolis-Honeywell Regulator Co., Minneapolis, Minn., a corporation of Delaware. Application Feb. 24, 1943, Serial No. 476,891. 16 Claims. (Cl. 257-3.)

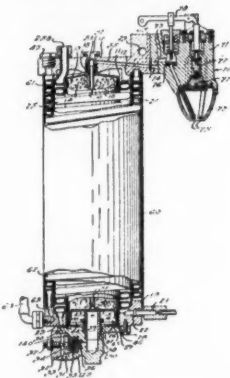
1. In a heating and cooling system of the type wherein radiation from and to the

universe is utilized for heating and cooling a fluid medium, in combination, a heat storing means, a cold storing means, a closed fluid system having portions in heat exchange relation with said heat and cold storing means and a radiation por-



tion exposed for radiation from and to the universe, and means to selectively render the said heat exchange portions effective and ineffective.

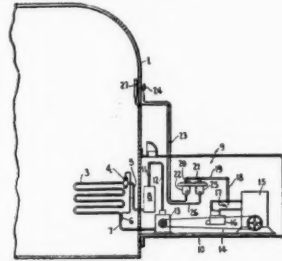
2,396,460. COOLING APPARATUS. Carmelo V. Di Pietro, Birmingham, Mich. Application Jan. 8, 1943, Serial No. 471,784. 3 Claims. (Cl. 62-141.)



1. In a beverage dispensing apparatus, a refrigerated carbonator, means forming a chamber around the carbonator in thermal contact with the carbonator, plural tubes coiled in the chamber for

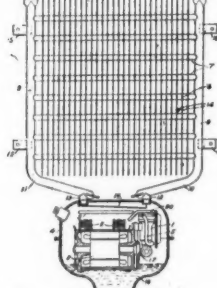
receiving different flavored liquids, and outlet means connected with the carbonator and the coils.

2,396,559. AIR-COOLING APPARATUS. Earnest J. Dillman, Detroit, Mich., assignor to Detroit Lubricator Co., Detroit, Mich., a corporation of Michigan. Application March 13, 1944, Serial No. 536,229. 4 Claims. (Cl. 62-4.)



1. A cooling apparatus for buses comprising a bus body having an enclosed space for human occupancy, a supporting structure external of said space, a refrigerating apparatus having a condenser and compressor mounted on said supporting structure and having a refrigerant medium evaporator positioned in said space, an internal combustion engine geared to and for driving said compressor and mounted on said structure, a throttle valve controlling the speed of said engine, and differential temperature responsive means controlling said throttle valve in accordance with a desired difference between the temperatures within and external of said space, said responsive means being so proportioned and related to each other that the temperature in said space increases at a less rate than the rate of temperature increase external of said space.

2,396,573. REFRIGERATING APPARATUS OF THE COMPRESSION TYPE. Rudolf Hintze, Berlin-Charlottenburg 9, Germany; vested in the Allen Property Custodian. Application Sept. 29, 1941, Serial No. 412,875. In Germany Jan. 18, 1940. 3 Claims. (Cl. 62-115.)



1. A refrigerating apparatus of the compression type whose condenser consists of a plurality of cross tubes and two vertical tubes connected thereto and is so secured to the refrigerator cabinet that it is substantially in parallel relation to a vertical outer wall of the refrigerator cabinet, characterized in that the vertical tubes are provided with portions extending from the condenser to serve as supports for the motor-compressor housing and as refrigerant conduits which connect the compressor with the condenser.

AVAILABLE FOR LICENSING OR SALE

Pat. 1,936,311. PORTABLE FAN. Patented Nov. 21, 1933. Horizontally positioned fan in columnar casing has openings for air intake and discharge, the latter of which may be separately adjusted as to size, etc. A cupola, equipped with a needle valve, serves as a humidifier when filled with water. Direction of air may be changed by tilting louvers connected to air discharge openings. (Owner) Adolf P. C. Schramm, 212 East 48th St., New York 17, N. Y. Groups 35-64; 36-21. Reg. No. 2,397.

Perrett Joins Frigidaire Range Sales Division

DAYTON, Ohio—W. W. Perrett, recently discharged from the Army of the United States, has joined the Frigidaire range and water heater sales division, reports C. J. Prashaw, manager, range and water heater sales.

Mr. Perrett, who served for three years as a Major in the Surgeon General's Office on purchase production and allocation, first became associated with the electrical appliance field as appliance sales supervisor for the Philadelphia Electric Co. in 1933.

Staley To Contact Coast Firms For Canfield Co.

BRIDGEPORT, Conn.—A new sales office is being opened on the west coast by H. O. Canfield Co. here, manufacturer of industrial rubber and synthetic rubber parts, with H. G. Staley as sales manager, announces H. J. Donnelly, president.

Mr. Staley, a returned veteran, was formerly sales manager of a mid-western supply company. He will personally direct sales contacts with manufacturers in the electrical, plumbing, and air conditioning fields.

Hodnett Opens In Wichita

WICHITA, Kan.—Allen Hodnett has opened a home and electrical appliance store at First and St. Francis Sts. in Wichita, with the Hotpoint franchise.

CLASSIFIED ADVERTISING

RATES for "Positions Wanted" \$2.50 per insertion. Limit 50 words.

RATES for all other classifications \$5.00 per insertion. Limit 50 words.

Advertisements set in usual classified style. Box addresses count as five words, other addresses by actual word count.

PAYMENT in advance is required for advertising in this column.

POSITIONS WANTED

HEAT TRANSFER ENGINEER with fluid flow and refrigeration experience, desires position with progressive organization developing refrigeration and heat transfer products. Worked as project engineer on condenser manufacture, water cooler design, unit coolers, and unit heaters, experienced with spot, seam welding of steel and aluminum, braying and soldering. Box 1961, Air Conditioning & Refrigeration News.

AVAILABLE AT ONCE—Have 6 years experience as service man, 4 years as Manager Refrigeration Jobbing house, 4 years in sales and engineering. Would like a position my experience qualifies me to fill. If interested, write at once to Box 1963, Air Conditioning & Refrigeration News.

REFRIGERATION MECHANIC desires position with reliable firm preferably in Pittsburgh area. Capable, well experienced in sales and servicing of all makes domestic boxes and sales, servicing, and installation of commercial equipment, sales and service managerial experience, age 29, 2 children. Box 1964, Air Conditioning & Refrigeration News.

REFRIGERATION SERVICE MAN in Sweden with eight years experience in service and installation of various commercial coolers wants a couple of years experience in America. Twenty-six years of age. Arriving in U. S. A. during the early summer of 1946. Box 1965, Air Conditioning & Refrigeration News.

POSITIONS AVAILABLE

REFRIGERATION MECHANIC wanted. Must be A-1 for commercial and air conditioning. Only ex-servicemen preferred. P. O. Box 921, Pensacola, Fla.

MAN with experience capable of manufacturing electric water coolers, pressure or bottle type. Must understand design and all phases for starting and setting up a production organization for a responsible Refrigerator Manufacturer. Good proposition for right man. State age and experience. Box 1957, Air Conditioning & Refrigeration News.

EQUIPMENT FOR SALE

FOR SALE: Air-cooled and water-cooled remanufactured condensing units. 1/4 up to 2 hp. Write for particulars. EDISON COOLING CORP., 310 East 149th St., Bronx 51, N. Y.

RANCO, PENN new low pressure controls available. 1-hp. rating at \$3.75 each. GENERAL REFRIGERATORS CORP., 678 Broadway, New York 12, N. Y. STuyvesant 9-1222.

FOR SALE: Isobutane refrigerant. Price small lots—\$1 per pound; in lots of 100 pounds, 65 cents per pound. Freezer-O, a perfect refrigerant for Frigidaire Meter Miser—price in small lots \$1.50 per pound; lots of 100 pounds \$1 per pound. Send your cylinders to STANDARD REFRIGERATION CO., McKees Rocks, Pa.

MILK COOLERS—New—complete with condensing units unusually well built—4 and 6 can available for immediate shipment—Dealership open in certain parts of country. Box 1962, Air Conditioning & Refrigeration News.

BUSINESS OPPORTUNITIES

FOR SALE: Commercial refrigeration sales and service business located in one of the best areas in the state of California. Approximately \$30,000 merchandise. Box 1951, Air Conditioning & Refrigeration News.

SALES ENGINEER WANTED

Established mid-west manufacturer requires sales engineer who understands the application of water regulating valves for various uses. Man is to travel nationally calling on commercial accounts to determine their unit requirements for function and space. Will also devote part time at factory assisting in design changes. Salary and commission basis.

Write fully giving age, experience, and references. Address Box 1954, Air Conditioning & Refrigeration News.

KRACK ENGINEERED

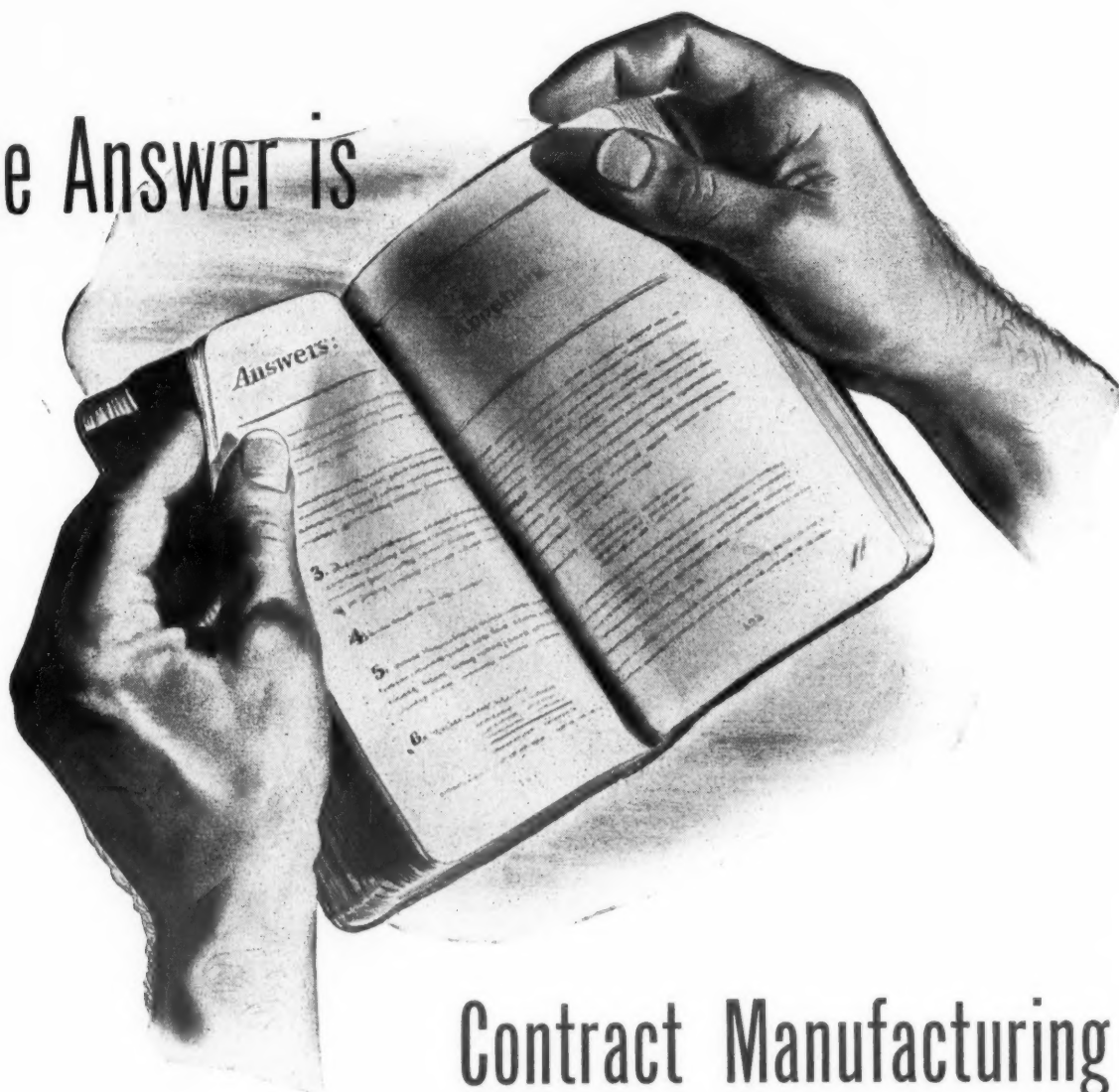
UNIT COOLERS

FIN COILS

AIR CONDITIONING

Refrigeration Appliances, Inc.
923 W. Lake St., Chicago 7, Ill.

The Answer is



Contract Manufacturing

DURING World War II, all industry recognized the principles of contract manufacturing as the only means of getting sufficient quantities of war materiel to our fighting forces on time.

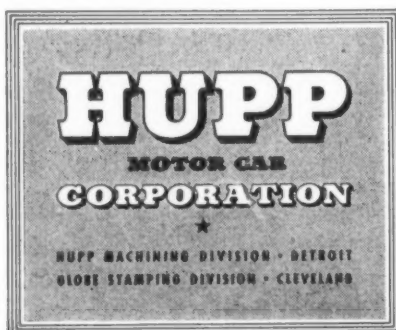
The economic war for profitable peace-time markets is now beginning. The rules are virtually unchanged. The company which can present its products to its buying public first will attain the maximum share of its markets. Again, as in war, to many the answer is contract manufacturing.

Hupp, an experienced contract manufacturer, can help you with your production problems NOW. Hupp's plants are currently serving some of the leading industrial firms in several industries, producing machined parts, stamping, rolling, welding and painting; making sub-assemblies and complete assemblies—on a mass-production, efficient cost basis.

Hupp, with plants in Detroit and Cleveland, with able engineering, competent tooling, and complete and efficient manufacturing facilities, is

ready to work with you to remove your production road-blocks.

Call Hupp, an experienced contract manufacturer.





4 Companies Name Export Officials

Boynton to Europe for IGE

NEW YORK CITY—Following his recent election to the vice presidency of International General Electric Co., Inc., Kenneth K. Boynton was preparing to depart for London, England, to take charge of I.G.E.'s relationships with associated companies in Europe.

W. R. Herod, president of I.G.E., said Mr. Boynton will be the senior representative for all the company's business on the Continent. Mr. Boynton plans to establish a temporary address at Crown House, Aldwych, London.

One year after joining I.G.E. in 1919 as an engineer, Mr. Boynton was sent to Yokohama, Japan. In 1923, he went to General Electric of South America in Mexico City and in 1931 became general manager there.

Prior to his present assignment, Mr. Boynton was president and chairman of the board of G.E.S.A. of Mexico.

Wrasse in New Bendix Post

SOUTH BEND, Ind.—Anthony E. Cascino, former OPA economist, succeeds F. A. Mitchell as head of market research and statistics, for Bendix Home Appliances, Inc., and George T. Wrasse, recent Navy dischargee, is new assistant export manager, it has been announced by Harlow K. Lyons, director of the distribution department.

Selected in 1945 as Chicago's outstanding young citizen, Mr. Cascino had just finished a year as OPA branch economist in Washington, Mr. Lyons said. For the two years prior to his service in Washington, Mr. Cascino was an instructor in economics at Northwestern university, it was added. After completing his undergraduate work in business administration at University of Illinois, he obtained his M.A. from Northwestern.

Mr. Wrasse was a field representative with Household Finance Corp. before joining Bendix in 1940, Mr. Lyons pointed out. At the time of his entry into the armed forces, he was assistant personnel director.

Ask British Refrigeration Data

LONDON, England—Inquiries directed to manufacturers and exporters of refrigeration and air conditioning products have been received from Bulgaria, Holland, India, Palestine, and Persia, by the London Chamber of Commerce.

Lett Moved Up at Crosley

CINCINNATI—Tye M. Lett, Jr., has been appointed director of exports of The Crosley Corp., replacing John W. DeLind, Jr., according to an announcement by S. D. Mahan, vice president and general sales manager of Crosley.

Mr. Lett has been assistant export director since joining Crosley last July. Mr. DeLind recently resigned.

After serving the Navy in World War I, Mr. Lett joined the New York office of General Motors Overseas Operations. He held various positions with this company in India,



TYE M. LETT, JR.

Ceylon, Chile, Venezuela, and other Latin-American countries.

Later, he served as regional manager in the Caribbean and South American regions for Frigidaire, Ltd., G-M division formerly responsible for Frigidaire sales and service in overseas territories. A subsequent position was that of manager of Delco Frigidaire division in Mexico.

Mr. Lett later served in China and Burma with Allison engine division of the corporation as technical advisor and maintenance engineer with "The Flying Tigers" attached to the Chinese air force. From China, he returned to England to establish the European zone headquarters for Allison.

Norway-Chile 'Reefer' Run

NORWAY—Each of three new steamships now operating between Norway and Valparaiso, Chile, has 95,000 cu. ft. of refrigerated space and a cargo capacity of 8,570 tons.

Rackin Amcoil Export Head

NEWARK, N. J.—Harold Rackin has been appointed export manager at the American Coils Co. here, according to M. Parcaro, general executive manager. In his new position, Mr. Rackin will be responsible for the furtherance of world-wide sales of the Amcoil line of air conditioning and refrigeration equipment.

Prior to his association with American Coils, Mr. Rackin was active in international trade in Europe, the near East, Africa, and Latin America, as manager for the industrial division of Corneliusen & Stakgold, Inc., New York and Antwerp.

Service Men Go to School

PHILADELPHIA—Practical and theoretical instruction in the servicing of Philco products has been given 30 export service managers from all parts of the world attending Philco International Corp.'s two-month training course, Dempster McIntosh, president, announces.

These distributor service men—from such countries as Peru, Iceland, Netherlands West Indies, New Zealand, and Bolivia—will pass on knowledge gained during the refresher course to dealer service men back home.

To overcome language difficulties, the students were divided into English and Spanish-speaking groups. In the radio course alone, 35 experiments and lectures were prepared in both English and Spanish, Mr. McIntosh said.

Practical work on Philco's 1946 products and visits to the company's Philadelphia plants and television station, WPTZ, supplemented lecture periods.

The school ran from Mondays through Fridays. On Saturdays, trips were made to Atlantic City, Valley Forge, and points of interest in Philadelphia.

Bendix 'Sampling' Begins

SOUTH BEND, Ind.—Recent shipment of 20 automatic washers to a Mexican distributor, inaugurating the sampling of foreign dealers of Bendix Home Appliances, Inc., will be followed by shipments to Canada in May and to Switzerland in July, Harlow K. Lyons, Bendix export manager, announces.

The Mexican distributor, Cia Mercantil Internacional, S. A., in Mexico City, will receive an allotment of "some machines each month from now on," Mr. Lyons said. Sample washers will be allocated to dealers in Mexico City, Monterrey, Chihuahua, Torreon, Tampico, Guadalajara, Celaya, Toluca, and Veracruz.

Arrangements for the sampling of 42 Swiss dealers in July were worked out during the recent visit of the Geneva distributor, Rene Odier, partner in Applications Electriques, and his sales manager, Georges De Uthemann, reported on the service being given by the 350 Bendix automatic Home Laundries sold in Switzerland prior to the war.

Sampling of Canadian dealers is scheduled for May, following selection of distributors, Mr. Lyons an-

nounced. As production increases, other countries will be sampled and supplied, he said.

Refrigerating Plant in Chile

OSORNO, Chile—Construction of a refrigerating plant to handle 300 animals daily and of an ice-making plant to ice 10 refrigerator cars daily is planned by Frigorifico Osorno, S. A., here.

In soliciting bids on the machinery and equipment for the refrigerating plants, the firm specified it must have a daily capacity of 100 head of cattle averaging 250 kilograms of dressed meat each, 100 head of hogs averaging 80 kilograms, and 100 head of hogs averaging 20 kilograms. Specifications also called for a storage space for three days' production and a freezing room with a capacity of 300 tons of meat.

Ceylon Import Figures

INDIA—The value of refrigerating machinery imports into Ceylon in the first half of 1945 is reported to be 46,720 rupees (a rupee is approximately equivalent to 32 cents). The part supplied by the U. S. was valued at 8,680 rupees.

GENUINE
MAYFLOWER
AIR CONDITIONERS

Air Conditioners
Licensed Under
U. S. Patents
No. 2,048,246
No. 2,055,528

MAYFLOWER PRODUCTS, INC.
13 S. 5th St., Richmond, Ind.

REFRIGERATION ACCESSORIES

- Instantaneous Water and Beverage Coolers.
- Oil Separators.
- Two-Temperature Valves.
- Accumulator Heat Exchangers.
- Equalizer Tanks.
- Controlled Temperature Photographic Processing Units.
- X-Ray Refrigerating Units.

TEMPRITE PRODUCTS
CORPORATION
47 PIQUETTE AVENUE DETROIT 2, MICHIGAN

Members of the Refrigeration Equipment Wholesalers Association

Your refrigeration parts and supply house in Central New York and Northern Pennsylvania

TED GLOU
CENTRAL SERVICE SUPPLY CO

516-18-20 E. Erie Blvd., Syracuse, N. Y. Phone 5-4000
209-211 Jefferson Ave., Scranton, Pa. Phone 3-4000

GET SET WITH FOGEL
INQUIRE NOW ABOUT OUR COMPLETE LINE
INTERESTING PROPOSITION TO QUALIFIED DISTRIBUTORS
A FEW TERRITORIES STILL AVAILABLE

FOGEL REFRIGERATOR COMPANY Since 1899
5400 Eadom St., Philadelphia 37, Pa.

PETE and PAT . . . The PENN-TUBE Pals

"Listen, Pat—I KNOW Penn Tubing would make a frame bright as gold, but gimme that coil—we need it on this job!"

Of course, PENN TUBING is bright as gold . . . clean . . . uniform . . . easy to bend, too, and ends sealed. Your jobber has it in 25-, 50- and 100-ft. coils . . . all sizes, 1/8" to 3/4" inclusive.

REMEMBER! IT'S PENN TUBING for PERFECT PERFORMANCE

PENN BRASS & COPPER CO.
Phone 35-111 ERIE - PENNSYLVANIA
Manufacturers "SUPERIOR" BRAND
SEAMLESS REFRIGERATION Tubing
1920-1945 ★ OUR 25TH ANNIVERSARY

Another SUPERIOR FIRST

The "UNI-HOLE" Flanged Compressor Valve

. . . Has Universal bolt holes for use with 5/16" bolts or cap screws, to facilitate installation on compressor flanges having 1-3/8", 1-1/2", 1-5/8", or 1-3/4" centers.

Simply install the "Uni-Hole" Valve in its proper position . . . add the two heavy washers (supplied with each valve) between the flange and bolt, or cap screw head . . . then tighten. That's all there is to it!

Ask your jobber to show you the SUPERIOR "Uni-Hole" Flanged Compressor Valve. You're sure to like it! It's a natural . . . and besides saving you installation time, it reduces your stocking problem. One size does the work of four!

The diagrams at the right tell the story.

SUPERIOR VALVE & FITTINGS COMPANY
PITTSBURGH 26, PENNSYLVANIA
OFFICES IN PRINCIPAL CITIES • STOCKS CHICAGO (6) • LOS ANGELES (15) • JOBBERS EVERYWHERE

Industry Studies Building 'Freeze' --

(Concluded from Page 1, Column 5)

The section of the housing order which directly affects the commercial refrigeration and air conditioning industries is that pertaining to "fixtures and mechanical equipment." According to section (b) (2) of the order, the restrictions apply to "constructing, repairing, making additions or alterations (including alterations incidental to installing any kind of equipment, improving or converting structures, or installing or relocating fixtures or mechanical equipment in structures."

"Fixtures and mechanical equipment" are defined by the order in section (b) (3) as follows:

'FIXTURES' DEFINED

"The term 'fixture' means any article attached to a building or structure and used as a part of the building or structure. The term 'mechanical equipment' means any equipment which is used to operate a building or other structure. The following items are included within the phrase 'fixtures and mechanical equipment' if they are attached to the building, or structure in any of the ways indicated later in this paragraph: plumbing, heating, ventilating, and lighting equipment, paneling, bookcases, bars, soda fountains, show cases, booths, wood or metal partitions, and the like.

"These articles are considered to be attached to a building or structure if they are attached by nails or screws to the building, if they are connected to the plumbing or other piping system of the building, if they are connected to the lighting system of the building (except by connection to an existing outlet), or if a base or foundation is built for the item, or if the item is cemented to the building or structure.

"The phrase 'fixtures and mechanical equipment' does not include the following: machine tools, blast furnaces, conveyors, elevators, process piping, control or testing equipment used for industrial or utility purposes or in a laboratory, power generating or transmitting equipment, such as boilers, generators, transformers, and the like (however, where the purpose of boilers, transformers, and similar equipment is primarily to provide electricity or

steam for lighting or heating the building in which they are installed, they would be mechanical equipment), medical equipment in a hospital, washing machines or dryers in a commercial laundry, compressors or cooling equipment in a cold storage warehouse or frozen food locker plant, gasoline pumps and hydraulic lifts in a garage or service station, and stoves, refrigerators (other than refrigerators constructed as an integral part of a building), food-warming equipment and dishwashing equipment in a restaurant."

Numerous exemptions are contained in the veterans' housing order, based on the dollar value of the construction or repair work involved. Where the value of the work would run higher than the maximum listed under the exemptions it is necessary to obtain permission from CPA before beginning work. The following excerpts from the official order list these exemptions:

"1. \$400 for a house or other structure, (such as a garage) on residential property designed for occupancy by five families or less. This allowance also applies to farmhouses and other housing accommodations on farms, except bunkhouses, and other accommodations for transitory farm laborers.

"2. \$1,000 for a hotel, resort, apartment house, or other residential building designed for occupancy by more than five families.

"3. \$1,000 for a building used primarily for one or more commercial or service establishments such as offices, banks, stores, laundries, garages, restaurants, night clubs, theaters, repair shops, warehouses, frozen food locker plants, and radio stations.

"4. \$1,000 for a farm, excluding farm houses which are covered by paragraph (1) above. A farm means a place used primarily for raising crops, livestock, dairy products, or poultry for the market.

"5. \$1,000 for a church, hospital, school, college, or a publicly owned building used for public purposes, or for an orphanage or other building used exclusively for charitable purposes.

"6. \$15,000 for a factory, plant, or other industrial structure which is used for the manufacturing, processing, or assembling of any goods or

materials, for a logging and lumber camp, for a pier (other than a pier designed for amusement, entertainment, or other commercial purposes), for a structure used for, or in connection with, a railroad or street railway or a commercial airport, for a bus terminal, for a truck terminal operated by a common or contract carrier by truck, or for a research laboratory or pilot plant or for a motion picture set.

"7. \$200 for a structure covered by this order which does not fall within one of the classes listed above.

COSTS TO BE INCLUDED

"For the purpose of determining whether a particular job is exempted from this order" by the above, explains CPA, the "cost" of a job "means the cost of the entire construction job as estimated at the time of beginning construction. This includes cost of paid labor engaged in the construction work, regardless of who pays for it, the cost or value of new fixtures, mechanical equipment, and materials incorporated in the structure, whether or not obtained without paying for them, and the amount paid for contractors' fees. It does not include the cost or value of previously used fixtures, mechanical equipment, and materials, the value of unpaid labor, or the cost or value of machinery and equipment (other than mechanical equipment) or the cost of labor engaged in assembling and installing the machinery and equipment."

For the present, at least, CPA does not intend to allocate supplies for new construction, it was announced last week. The agency does not plan to order producers of such construction items as electrical wire, pipes

and fittings, bathtubs, window sash and frames to ship specified amount to dealers in certain parts of the country.

CPA announced last week that it plans to give "generous consideration" to applications for new mill and factory construction under the building freeze order if such work would aid unemployment in districts where the housing situation is not too acute. Industrial construction is limited by a ceiling of \$15,000.

Special attention will also be given on industrial applications for the production or processing of critical items, such as fractional horsepower motors, CPA declared. Some 35 items are currently on CPA's list of "critically scarce" products.

In order to begin work which is prohibited by the housing order, it is necessary to apply to CPA for approval. If the application covers housing accommodations under Priorities Regulation 33 (including farm dwellings), it should be made on Form CPA 4386. Applications for non-farm housing accommodations should be filed with the local office of the Federal Housing Administration. Applications covering housing accommodations on a farm should be filed with the appropriate County Agricultural Conservation Committee.

"The assignment of ratings for, or approval of housing accommodations under Priorities Regulation 33, whether before or after the issuance of this order, constitutes an authorization under this order to do the work for which priority assistance or approval was given under that regulation," states the housing order.

If the application covers work on a farm (other than a farm dwelling), the application should be made on

Form CPA 4423 and should be filed with the appropriate County Agricultural Conservation Committee.

If work on any other kind of structure is involved, the application should be filed on Form CPA 4423 with the appropriate Construction Field Office of CPA.

"When a person is specifically authorized, either by approval of Form CPA 4423 or Form CPA 4386 or otherwise, to do work restricted by this order, he must observe the restrictions imposed on him by the authorization, and in doing the authorized work, he must not do any work of the kinds covered by the order unless it is specifically covered by the authorization.

MUST DISPLAY APPROVAL

"When an application on Form CPA 4423 has been approved, a placard will be sent to the applicant stating that the construction has been approved under this order. The applicant must place in the placard the project serial number and must set up the placard in front of the project site in a conspicuous location within five days after construction has been started and he must keep the placard there until completion of the building," the order states.

CPA suggests that district CPA officials may be contacted through local offices of the Federal Housing Administration, since offices have not yet been established in all cities, due to the shortage of office space.

An inquiry at the Detroit regional office of the CPA revealed that the agency is not yet fully prepared to handle applications for construction authorizations. The office has received only 100 application forms to date.



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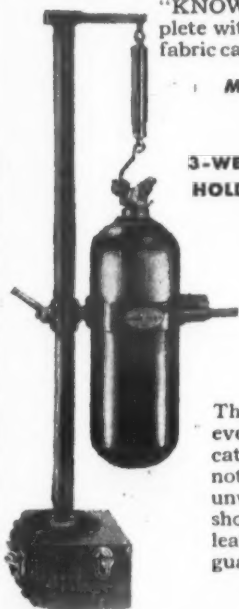
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